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ABSTRACT

A two-phase investigation was conducted to (1) review admission standards, criteria, and practices in use by institutions delivering public occupational education programs, and (2) ascertain the degree of equity associated with admission standards relevant to public occupational education programs in Florida. Phase 1 was conducted by surveying two area vocational technical centers (AVTC's), two community colleges, and four Comprehensive Employment and Training Act (CETA) programs in each of Florida's five regions. Eleven admission standards or practices were identified. The five which were identified most frequently included the following: ability to meet minimal physical performance levels or standards necessary to an occupational license or employment, individual interviews by counselors and/or instructors, previous overall grade point average, standardized achievement test scores, and minimum age requirements necessary to qualify for an occupational license or employment. Phase 2 of the study involved surveying 377 persons representing AVTC and community college administrators, counselors and instructors; CETA administrators and instructors; advisory council members for occupational education programs; and advocates for various groups representing women, minorities and the disadvantaged. This phase of the investigation resulted in the identification of four admission practices which had a high degree of equity and four with a low degree of equity. (Author/KC)

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THE FLORIDA PUBLIC OCCUPATIONAL EDUCATION ADMISSION
STANDARDS AND PRACTICES STUDY

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August, 1980

The project herein was conducted for the Florida State Advisory Council on Vocational and Technical Education pursuant to a grant administered by the Florida Department of Education and the Division of Employment and Training. Contractors undertaking such projects are encouraged to express freely their professional judgments in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent the official position or policy of the Florida Department of Education, the Florida State Advisory Council, or the Division of Employment and Training.

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The purpose of this investigation was two-fold, phase one reviewed admission standards, criteria, and practices in use by institutions delivering public occupational education programs, and phase two ascertained the degree of equity associated with admission standards relevant to public occupational education programs in Florida.

Phase one was conducted by surveying two area vocational technical centers (AVTC's), two community colleges, and four programs administered by prime sponsors of the Comprehensive Employment and Training Act (CETA) in each of Florida's five regional areas. Eleven admission standards or practices were identified. The five which were identified most frequently

included: ability to meet minimal physical performance levels or standards necessary to an occupational license or employment, individual interviews by counselors and/or instructors, previous overall grade point average, standardized achievement test scores, and minimum age requirements necessary to qualify for an occupational license or employment.

Phase two of the study involved surveying three hundred and seventy-seven individuals representing AVTC and community college administrators, counselors and instructors; CETA program administrators and instructors; advisory council members for occupational education programs; and advocacy group members representing blacks, hispanics, women, handicapped, and disadvantaged individuals. This phase of the investigation resulted in the identification of four admission practices which had a high degree of equity associated with them and four with a low degree of equity.

A three part survey instrument (the public occupational education admission equity opinionnaire) was developed from data collected in the first phase of this investigation and through selected findings identified in a comprehensive review of related literature. Respondents rated the equity of 19 admission standards and practices as they might be: (1) applied to institutional or program area admission of students (Part B of instrument), and (2) applied to admitted students on waiting lists to enter oversubscribed programs (Part C of instrument). A five-point Likert-type scale with a low of one and high of five was used for all ratings. Part A of the instrument was used to collect demographic data.

Data gathered from the opinionnaire were statistically analyzed. Analysis of variance on repeated measures was applied to the data collected from the total population to determine any differences in the degree of

equity associated with the 19 factors. Significant differences at the .05 level occurred between the items' means on Parts B and C of the opinionnaire. Interaction occurred between the items and sub-groups of the total population. A oneway multivariate analysis of variance procedure was used to test the differences between sub-groups' ratings. Sub-groups by institution or affiliation differed significantly, however, sub-groups by title or role category did not differ.

Finally, a rank ordering procedure was used to identify the items with the highest and lowest degree of equity. The admission standards rated most equitable on Parts B and C of the instrument were: individual interviews by counselors and/or instructors, the ability to meet minimal physical performance levels or standards necessary to an occupational license or employment, the first students to apply will be the first students admitted, and minimum age requirements necessary to qualify for an occupational license or employment. The four admission standards rated least equitable on Parts B and C of the instrument were: a lottery selection system for all admissions, existing geographic boundaries and/or sending school boundaries, admission of an equal number of students from all sending schools, and admission of a proportional number of students based on the size of each school's student population.

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Chapter I

INTRODUCTION

Federal Commitments

The passage of the Education Amendments of 1976 during the final days of the Ninety-Fourth Congress concluded nearly two years of intensive legislative development. Title Two of this omnibus law, often referred to as the Vocational Education Amendments of 1976, included specific revisions that amended the Vocational Education Act of 1963. Through such action, Title Two served as another significant point of progress in a Federal commitment to meet the occupational training needs of all persons. Federal funds were authorized to states (P.L. 94-482):

... so that persons of all ages in all communities of the State ... will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training. (Title II, Part A, Section 101)

Such emphasis further built on an earlier Federal commitment as evidenced by the Vocational Education Act of 1963 and the 1968 Amendments to that Act. These two pieces of legislation were designed to be responsive to the needs of all persons. A comment by one author summarized this emphasis as "programs for people," rather than "people for programs" as the central theme of these pieces of legislation (Nystrom, 1973).

The broad population to be served by both of these enactments was well defined. As listed in the Declaration of Purpose Section of the Vocational Education Act of 1963, (P.L. 88-210) eligibility included:

... that persons of all ages in all communities of the State - those in high school, those who have completed or discontinued their formal education and are preparing to enter the labor market, those who have already entered the labor market but need to upgrade their skills or learn new ones, and those with special educational handicaps - will have ready access to vocational training or retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and abilities to benefit from such training. (Title I, Part A, Section 101)

It should be noted that the population to be served by the 1968 Amendments to the Vocational Education Act of 1963 was expanded to include students in postsecondary schools. These two pieces of legislation have been cited as significant in their impact on increasing the availability of vocational education programs (Reid, 1976).

A further indication of a Federal commitment to meet the occupational training needs of all individuals was found in the Education for All Handicapped Children Act, Public Law 94-142. Passed by Congress in November 1975, this legislation began its implementation during the 1977-78 academic year. Since that time, this legislation has greatly expanded the availability of vocational education programs to handicapped individuals in a "least restrictive" manner. Additional procedural safeguards to special segments of the population who might desire access to occupational education programs was insured through Public Law 94-482. Assurances were provided to handicapped and disadvantaged students as well as provisions to overcome sex bias and reduce sex stereotyping in occupational education programs (Kingsley, 1979).

The Vocational Education Act of 1963 and Amendments to it in 1968, 1972, and 1976, as well as the Education for All Handicapped Children Act were

all designed to provide special services to the population of in-school youth who are under twenty-one years of age. These pieces of legislation were administered by the U.S. Department of Health, Education and Welfare.

Another branch of the Federal Government, the Department of Labor has also been responsible for the administration of additional legislation designed to aid in the delivery of occupational education. Federal mandates through the Department of Labor stipulated the provision of occupational education for a somewhat different population than was to be served in accordance with the legislative requirements for vocational education presented thus far. The Federal commitment during the 1960's and early 1970's was designed to meet the occupational training needs of an out of school youth and an adult population which is unemployed or underemployed. Two major pieces of legislation fit into this category.

The Manpower Development and Training Act of 1962, Public Law 87-415, represented the first massive response of the Federal Government to meet the occupational training needs of an adult population through a program administered by the Department of Labor. Amended in 1963, 1965, and 1968, this legislation was broadened in its scope to address nationwide employment problems of that era. Specialized training programs were provided to reduce underemployment and unemployment among adults and out-of-school youth as determined by the Department of Labor and local employment agencies.

The second major piece of Federal legislation to be administered by the Department of Labor to provide occupational training was enacted in 1973 and amended in 1978. The Comprehensive Employment and Training Act (CETA) as amended in 1978, Public Law 95-524, consisting of eight titles

to provide job training and employment opportunities for economically disadvantaged, unemployed and underemployed individuals. Further, CETA was developed with the decision making authority decentralized from the Federal Government to states and local jurisdictions in the form of prime sponsorships.

The combined efforts of the Department of Health, Education and Welfare, and the Department of Labor have produced a bifurcation of the occupational training delivery system currently offered in the United States. This dual system has been developed with the underlying assumption of providing services to all individuals who may be in need of such training. This series of legislation has reflected a Federal commitment to respond to the cultural needs of society which were manifested through various economic, social, professional or political indicators (Nystrom, 1976). Specific examples of such indicators will be developed in the next section of this chapter as well as other sections of this report.

Need for the Study

The climate facing the delivery of public occupational training programs administered by the Department of Health, Education and Welfare, and the Department of Labor is complex. The satisfaction of local and national contemporary needs further compounds this challenge.

Recent guidelines developed by the Office of Civil Rights released through the March 21, 1979 Federal Register indicate that the process traditionally used in placing students in occupational training programs may have to be re-examined. As prescribed under these guidelines, recipients of Federal funds must insure that materials used for promotion and recruitment do not discriminate on the basis of race, color, sex,

national origin or handicap. Specific sections of these guidelines address admission criteria, recruitment, promotional activities, and accommodations for the handicapped. The promulgation of such information must be available in the languages known to be in use within local communities (Kapes and Greenwood, 1979).

The accessibility of public occupational training has been a concern of the Florida State Advisory Council on Vocational and Technical Education since its first annual report in 1970. Highlighted in that report was:

(1) the need expressed by the Council to recruit a greater number of handicapped and disadvantaged persons into training programs, and
 (2) the need to review the criteria to place individuals from target groups into occupational programs. In their 1971 annual report the Council recommended that tests which measure the learning potential of an individual be used for counseling and not for "screening" students out of programs. Other concerns were expressed by the Council in their 1977 Annual Report. It states that occupational training programs serving disadvantaged students could be improved by:

...(a) expanding promotional and outreach plans designed to increase the demand for postsecondary vocational and technical education among economically disadvantaged individuals;
 (b) providing high quality counseling and guidance services to the economically disadvantaged; and (c) reviewing occupational program admission standards and criteria to ensure that the standards and criteria are valid and are equitably applied to the economically disadvantaged. (p. 10)

The delivery of occupational training in Florida is structured to meet the needs of its total population. Presently the largest portion of vocational students are enrolled in programs in area vocational technical centers (AVTC) and comprehensive high schools with vocational programs.

Postsecondary degree programs in occupational education are available in Florida's Community College System. Additionally, the occupational education needs of others are being achieved through programs conducted at state hospitals, sheltered workshops and correctional institutions.

A heterogeneous population consisting of a wide-range in age and background is included in all programs offered throughout the state. The composition of students enrolled in an AVTC may include share-time students from another secondary school, the general adult population, foreign nationals on educational visas and students from outside agencies such as the Department of Labor in their Comprehensive Employment Training Act (CETA) programs. Efforts have also been made to make vocational education programs available to meet the needs of special target population groups such as minority, handicapped, disadvantaged, American Indian, Spanish speaking and women students.

As the population continues to increase in Florida, so do the demands placed on its vocational education system. Many facilities which are used to provide vocational education programs operate two or three shifts a day. This expanded method of operation, coupled with a diverse student population contributes to a situation which may not add to the optimum achievement of: (1) individual career goals, (2) State and Federal priorities, and (3) selection and recruitment of students in target populations (i.e., handicapped, disadvantaged, minority groups or women).

The composition of the student population in the state's public occupational education system may be dependent upon the recruitment and admission standards employed by individual institutions. Research efforts are therefore needed to explore the areas of recruitment, selection, and admissions in order to insure the achievement of State

and National priorities as well as to meet any of the needs which may be unique to an individual or groups of individuals.

Statement of the Problem

The problem investigated by this study was to review the admission standards, criteria, and practices used in the delivery of public occupational education programs in Florida. Institutional delivery systems which were investigated included: (1) Area Vocational Technical Education Centers (AVTC's), (2) Community Colleges, and (3) Programs administered by prime sponsors of the Comprehensive Employment and Training Act (CETA). It was anticipated that this investigation might increase the understanding of the accessibility of public occupational education available to the citizens of Florida.

Specific knowledge to be gained included: (1) a determination of admission standards and criteria currently in use, (2) the identification of the policies and practices which may be used to admit students on "waiting lists" to enter programs in which enrollments have reached maximum capacity, (3) an assessment of the problems associated with the development and implementation of admission policies and practices, and (4) the opinions of a diversified sample of persons associated with occupational education regarding the equity of factors used to admit students to public occupational education programs in Florida.

The null hypotheses which were tested in this study were:

- HO₁ There are no significant differences between the responses of the total population surveyed to any of the factors used for institutional or program area admission as measured by the public occupational education admission equity opinionnaire.

- HO₂ There are no significant differences between the responses of the total population surveyed to any of the factors used for students who have already been admitted to an institution or program area and who have been placed on a waiting list as measured by the public occupational education admission equity opinionnaire.
- HO₃ There are no significant differences between the responses of the sub-groups of the population surveyed to any of the factors used for institutional or program area admission as measured by the public occupational education admission equity opinionnaire.
- HO₄ There are no significant differences between the responses of the sub-groups of the population surveyed to any of the factors used for students who have been admitted to an institution or program area and who have been placed on a waiting list as measured by the public occupational education admission equity opinionnaire.

All hypotheses were tested at the .05 level of significance.

Scope and Limitations of the Study

This study investigated the admission standards, criteria and practices used in the delivery of public occupational education programs in Florida. This investigation was conducted using a representative sampling procedure to secure data and reach findings.

The findings of this study are limited in that they may not be generalizable to all public occupational education programs in Florida or other states. It is further recognized that this study was developed

at a specific point in time which represented the state-of-the-art of conditions in an ever-changing relationship between Federal and State regulations, institutional policies, social conditions and student needs. Application of the findings of this study at any future point in time may not be appropriate to new conditions as they may have developed. It is further recognized that the sample size used in this study was determined by the responses received. The strength of the findings rests on the face validity of the data collection instrumentation used.

An additional limitation of this study is noted in that the admission standards which have been identified as most equitable and least equitable were done so through a rank ordering process. All ratings were provided on an item by item basis. Any clustering or grouping associated with these items in this report is based solely on an analysis of the frequency of ratings to individual items collected. It does not represent a clustering of items by respondents nor does it reflect on the equity of any clustering of these or similar admission standards currently in operation.

Definition of Terms

To avoid any misunderstanding of terminology, the following definitions of terms are provided which will specifically apply to this study.

Admission

The fact of being allowed to enter a program of occupational study following a successful review of an applicant. The review would be typically structured around predetermined institutional, legislative or occupational standards. Actual program entry may be delayed due to space available.

Admission Standards

A term applied to any criteria, guidelines, regulations or practices which are institutionally applied to individuals seeking entry to public occupational education.

Advisory Council

Groups of individuals representing a local community who have been appointed to serve in an advisory capacity to area vocational technical centers and community colleges. They typically aid the educators by conducting community surveys, identifying training needs, evaluating programs, planning and/or modifying facilities, and establishing standards for selecting equipment and instructional materials.

Advocacy Group

Groups of individuals who are formulated for the purpose of speaking for, pleading for, supporting, espousing the rights of, or interceding on behalf of other persons. These other persons may include minority group members, women, or persons who are handicapped or disadvantaged.

Area Vocational Technical Center (AVTC)

As defined in the Florida State Plan for the Administration of Vocational Education under the Vocational Education Amendments of 1968, Part II:

Annual and Long-Range Provisions, 1977-1981, it states:

Any designated public school or institution under the supervision of the State Board for Vocational Education that is in one of the following categories:

1. A high school with a department exclusively or principally for the provision of vocational education to persons in preparation for entering the labor market (also may be termed "comprehensive high school").
2. A specialized high school exclusively or principally to provide vocational education to persons in preparation for entering the labor market.

3. A technical or vocational school that is exclusively or principally for the provision of vocational education to persons who have completed high school or who have left high school without graduation who are in preparation for entering the labor market. The school must admit as regular students both persons who have completed high school and persons who have left school without graduation.
4. A community college with a department or division to provide vocational education leading to immediate employment but not to a baccalaureate degree; the college must admit to the department or division as regular students both persons who have completed high school and persons who have left school without graduation. (p. 87)

Comprehensive Employment and Training Act (CETA), as Amended in 1978

A Public Law, 95-524, enacted to provide occupational training and employment opportunities for economically disadvantaged, unemployed, and underemployed persons in order to enable them to secure self-sustaining unsubsidized employment. Prime sponsors are responsible for administering such training programs at the local level.

Community College

As defined in the Florida State Plan for the Administration of Vocational Education under the Vocational Education Amendments of 1968, Part II:

Annual and Long-Range Provisions, 1977-1981, it states:

All educational institutions operated by local community college district boards of trustees under specific authority and regulations of the state board, and offering occupational education, adult continuing education, and courses and programs of general and academic education parallel to that of the first and second years of work in institutions in the state university system. (The term "junior college" may be used in lieu of "community college.") (p. 87)

Equity

A measurement construct used in this study to rate a listing of admission standards, criteria, practices, and regulations which may be applied to persons desiring access to public occupational education programs.

Occupational Education or Occupational Training

Instructional activities which lead to the development of skill proficiency levels necessary for gainful employment in any one of a host of specific occupational areas. This term is often used interchangeably with vocational education and may include instructional activities offered by area vocational technical centers, community colleges and programs administered by CETA prime sponsors.

Vocational Education

As defined in the Florida State Plan for the Administration of Vocational Education under the Vocational Education Amendments of 1968, Part II: Annual and Long-Range Provisions, 1977-1981, it states:

Instruction not leading to a baccalaureate degree, either graded or ungraded, that provides the following:

1. development of occupational proficiency necessary for gainful employment
2. exploratory courses designed to familiarize persons with the world of work and motivate them to pursue courses in vocational education
3. prevocational or technically oriented industrial arts courses
4. vocationally oriented home economics courses (p. 89)

Waiting List

A term applied to describe a situation where individuals who have been admitted to an occupational education program have also been placed on a waiting list to enter since the program of their choice has already reached maximum enrollment capacity.

Chapter II

REVIEW OF LITERATURE

Introduction

More than six decades have passed since the U. S. Federal Government formally recognized the need for providing its citizenry with the opportunity to acquire vocational skills. In 1917, mandates of the Smith-Hughes Vocational Education Act (P. L. 64-347) initiated the quest of the American dream to provide its' citizens with training for skilled occupations (Cross, 1975).

Forces associated with this legislative mandate sought the development of an educational system which would enable Americans to live meaningful and productive lives. The U. S. Government's goal to have all Americans engage in gainful remunerative employment has been and is currently moving along a variable continuum of legislative mandates.

The original thrust which seems to have led the way for the Smith-Hughes Act was the result of a document entitled "Report of the Commission on National Aid to Vocational Education, 1914." This report Stated:

There is a great and crying need of providing vocational education... for every part of the United States--to conserve and develop our resources; to promote a more productive and prosperous agriculture; to prevent the waste of human labor; to supplement apprenticeship; to increase the wage-earning power of our productive workers; to meet the increasing demand for trained workmen; to offset the increased cost of living. Vocational education is therefore needed as a wise business investment for this Nation, because our national prosperity and happiness are at stake and our position in the markets of the world cannot otherwise be maintained. (Panel of Consultants on Vocational Education, 1962, p. 1.)

Federal statutes implemented through the Department of Health, Education and Welfare and the Department of Labor have played a vital

role in the relatively young movement designed to meet the employment needs of special interest groups or the marginally employable. The following public laws and their subsequent amendments (most are not listed) have had a significant impact on employment training for handicapped and/or disadvantaged citizens:

- 1961 - Area Redevelopment Act
- 1962 - Manpower Development and Training Act
- 1963 - Vocational Education Act
- 1964 - Economic Opportunity Act
- 1968 - Vocational Education Amendments
- 1973 - Vocational Rehabilitation Act
- 1973 - Comprehensive Employment and Training Act
- 1975 - Education for All Handicapped Children Act
- 1977 - Youth Employment and Demonstration Projects Act
- 1978 - Comprehensive Employment and Training Act Amendments

These Congressional laws evolved from dual issues associated with the constructs of work and marginally employable individuals. Ehrle (1968) described the marginally employable [structurally unemployed] as:

Those who do not compete readily or efficiently in the labor market, and who are frequently employed at entry level jobs. They are frequently unemployed for various periods of time. Most importantly from the perspective of the "complete" model, they suffer from various dysfunctions, illnesses, handicaps, disorders and deficiencies. In short, they are "incomplete". (pp. 38-39)

Marginally employable [structurally unemployed] people with physical or emotional handicaps or serious economic disadvantage superimposed on a base of unstable or problem personalities have been identified as the most difficult individuals to motivate, train, and rehabilitate. Individuals classified as marginally employable have often quit school,

drifted from job to job, never functioned above an unskilled level, have incomplete employment records, and tend to be accident prone. They also may have a history of psychological instability and poor health, a distorted sense of reality, and feelings of dependency (Ehrle, 1968).

Impact on Federal Vocational Education Legislation

In October, 1961, pursuant to instructions from President John F. Kennedy, the Panel of Consultants on Vocational Education was convened by the Secretary of Health, Education, and Welfare. They were instructed to review, evaluate, and report on existing Federal Vocational Education Acts. This Panel's final report, Education for a Changing World of Work, offered numerous suggestions for improving the United States' vocational education system.

Many of the suggestions offered in the report were used in structuring Public Law 88-210, Vocational Education Act of 1963. General recommendations of the Panel of Consultants on Vocational Education (1962) included:

- Offer training opportunities to the 21 million noncollege graduates who will enter the labor market in the 1960's.
- Provide training or retaining for the millions of workers whose skills and technical knowledge must be updated, as well as those whose jobs will disappear due to increasing efficiency, automation, or economic change.
- Meet the critical need for highly skilled craftsmen and technicians through education during and after the high school years.
- Expand vocational and technical training programs consistent with employment possibilities and national economic needs.
- Make educational opportunities equally available to all, regardless of race, sex, scholastic aptitude, or place of residence. (p. XVII)

The Panel strongly urged continued cooperation between the Federal Government, states, and local communities in developing and improving

its citizens skills. Recommendations from the Panel made it clear that the partnership between Federal, state, and local government should support vocational and technical education service delivery systems other than the occupational categories specified in existing statutes. Specific target populations identified in these recommendations were:

- I. High school students preparing to enter the labor market or become homemakers.
- II. Youth with special needs who have academic, socioeconomic, or other handicaps that prevent them from succeeding in the usual high school vocational education program.
- III. Youth and adults who have completed or left high school and are full-time students preparing to enter the labor market.
- IV. Youth and adults unemployed or at work who need training or retraining to achieve employment stability.
- V. Adequate services and facilities to assure quality in all vocational and technical education programs. (Panel of Consultants on Vocational Education, 1962, p. XVIII)

One of the pressing problems cited in the report was the severe lack of nondirective guidance, occupational information, and relevant programming for youth with special needs. In commenting on the lack of special needs programs in vocational education the Panel said that "there is overwhelming evidence that the problems which make up the complex are old, traditional problems.... On the whole, vocational education has been largely for selected students" (p. 131). Obviously they were calling for a change in established procedures of selecting vocational education students.

If the Panel's report had simply enumerated faults of the existing vocational education system it could have been classified as "critical of the educational system" and filed with numerous other reports of like tenor. But the report did not stop with criticism. It offered specific recommendations for courses of action which would solve, or at least ameliorate, each of the problems identified.

The Panel made the following specific recommendations, which they believed would increase the level of quality of services provided to special needs students:

1. A strong program of vocational guidance and counseling should be maintained.
2. Youth with physical or mental handicaps can profit from vocational education programs and courses appropriate to their needs and limitations.
3. Careful selection and grouping should be made on the basis of aptitude, mental capacity, limitations, and needs; these students should not be enrolled in the various classes of the regular vocational program.
4. The occupational objectives of special-needs courses and programs may appropriately include training for occupations which are less than skilled and which may be limited in range and scope.
5. Definite provisions must be made for the continuing basic education of these young people, including diagnostic and remedial measures to assure competency in the foundation skills and citizenship and success in the world of work.
6. Some of these students may benefit from training for entering the regular vocational programs. Others may require more specialized training leading directly to employment when they leave school.
7. Teachers with specialized competencies should be utilized in the planning, teaching, and evaluation of programs for these students.
8. An active program of placement and followup, including appropriate referral services, should be an integral part of the program.
9. Continuing programs of experimentation, research, and evaluation, involving multiple cooperative relationships at all levels, should be initiated and maintained. (Panel of Consultants on Vocational Education, 1962, p. 132)

Each of the recommendations was worthy of serious consideration by every professional vocational educator. These guidelines provided a clear picture of the vocational special needs program envisioned by the Panel.

Legislation Implemented Through the
Department of Health, Education, and Welfare

Vocation Education Act of 1963 (P. L. 88-210)

The Vocational Education Act of 1963 (P. L. 88-210) stipulated the need for vocational education for individuals who had academic, socio-economic, or other handicaps that prevented them from succeeding in regular vocational programs. However, very few states responded by initiating programs to meet the individualized needs of special students (Whinfield, 1975).

Public Law 90-567, the Vocational Education Amendments of 1968, was consequently written with a strong emphasis on making high quality vocational education available to students with special needs. Emphasis was implicitly shifted from needs of programs to needs of students. Funds were finally earmarked along with the shifted emphasis in the 1968 amendments. Set-asides of 10% for the handicapped and 15% for the disadvantaged were meant to provide special programs and related services for these special needs groups (Halloran, Foley, Razeghi, and Hull, 1978).

State reports to the Federal Government in 1972 indicated that all states had finally designated at least one person on their state staff to assume major responsibility for planning, supervising, and monitoring vocational programs for special needs students. Procedures were developed in all states for identifying special needs students. In addition, many resources and techniques were initiated for meeting the individualized needs of special students. Some progress was made, but a great deal was left to be accomplished in order to achieve a national goal of vocational education programs at all levels for all categories of handicapped and

disadvantaged students (Comptroller General of the United States, 1974; Whinfield, 1975).

As late as 1976, the Federal Government apparently was still discontented with the implementation rate of programs and related services for some special needs populations. Consequently the 1976 Vocational Education Amendments increased the set-aside funds for the disadvantaged to 20% (Simcoe, 1979).

Civil Rights Act of 1964 (P. L. 88-352)

The Great Society Era not only concerned itself with the development of a National policy on training and retraining impoverished American citizens, but it inaugurated the vast movement against all areas of discrimination in the United States. This movement was spearheaded by the passage of the Civil Rights Act of 1964.

Discrimination on the basis of race, color, religion, sex, or national origin related to hiring or firing; wages or fringe benefits; classifying, referring, assigning, or promoting; extending or assigning use of facilities; training, retraining, or apprenticeships; or any other terms, conditions, or privileges of employment (Department of Labor, 1978), was outlawed through Title VII of that Act. These Statutes were applied to private employers, state and local governments, government organizations, educational institutions, employment agencies, and labor organizations employing or serving 15 or more persons (Marshall, 1975).

Title VI of this Act was applied to all recipients of Federal funds. Section 601 clearly stated that no person in the United States shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance on the grounds of race, color, or national origin.

Title IX of the Education Amendments of 1972 (P. L. 92-318) and
Title II of the Education Amendments of 1976 (P. L. 94-482)

Discrimination on the basis of sex was prohibited in educational programs or activities which receive Federal funds by Title IX of the Education Amendments of 1972 (U. S. Department of Labor, 1978). Previous to this legislation, Title VI of the Civil Rights Act of 1964 prohibited discrimination on grounds of race, color or national origin (not sex) by educational institutions receiving Federal funds (Keller, 1980).

More recently, Title II, the vocational education section, of the Education Amendments of 1976 mandated that sex bias, sex stereotyping, and sex discrimination be eliminated from all vocational education programs. Title II required every state to set forth policies and procedures that would assure equal access to vocational education programs by both women and men. The Statute also mandated that incentives be utilized to encourage both men and women to enroll in nontraditional programs of study (Vetter, Sechler, Lowry, & Canora, 1979). The Final Regulations for Title II, issued in October of 1977, defined "sex discrimination" as "any action which limits or denies a person or a group of persons opportunities, privileges, roles, or rewards on the basis of their sex" (Final Regulations for Public Law 94-482, 1977).

Rehabilitation Act of 1973 (P. L. 93-112)

Congress passed the Rehabilitation Act (P. L. 93-112) with the intent of providing America's 35 million handicapped citizens with a new era of equality. Section 504 of the Act was the first major Federal Law which protected the civil rights of the handicapped.

The statutes prohibited discrimination on the basis of mental or physical handicaps in all Federally funded programs and activities (Hermann & Walker, 1978). Regulations implementing Section 504 were finalized and signed in April of 1977. Mandates of this law prohibited intentional and unintentional discrimination and required recipients of Federal funds to take positive steps toward giving handicapped citizens equal opportunities in employment; as well as health, education, and social service programs. Language used in Section 504 is remarkably similar to the nondiscriminatory provisions of Title VI in the Civil Rights Act (applying to racial discrimination) and Title IX in the Education Amendments of 1972 (applying to educational discrimination on the basis of sex) (Halloran, Foley, Razeghi, & Hull, 1978).

Education for All Handicapped Children Act of 1975 (P. L. 94-142)

The need to provide vocational and career education for handicapped students was further exemplified by the passage of Public Law 94-142, Education for All Handicapped Children Act. This law mandated that each public education agency must provide free and appropriate full educational opportunities to all handicapped children.

Essentially this Statute required that all programs available for the nonhandicapped must be options for the handicapped. Handicapped students must be mainstreamed into regular classes, including industrial arts, consumer and homemaking education, and vocational education (Halloran, Foley, Razeghi, & Hull, 1978) on the basis of "least restrictive environment" (Kingsley, 1979; Parks & Rosseau, 1977).

Placement of handicapped students in vocational classes must result from a decision-making process based on each student's individual needs.

In secondary settings, each student's parent or legal guardian must be encouraged to participate on the team which makes this decision. This process was designed to protect the individual rights of all handicapped students between the ages of 3 and 21.

Legislation Implemented Through the
Department of Labor

Approximately 20 years ago the U. S. Federal Government enacted its first law against unemployment and underemployment of its citizens. This movement toward developing a National policy on vocational training and retraining for impoverished individuals was initiated with the Area Redevelopment Act in 1961; however, the first significant step toward this National policy came with the passage of the Manpower Development and Training Act (MDTA) (P. L. 87-415) of 1962.

These two Acts established the climate for the "Great Society" years of President Lyndon B. Johnson's Administration. The Manpower Development and Training act was funded to provide programs for retraining workers who lost their jobs due to technological changes; however, the Act eventually evolved into a general purpose training program for structurally and technologically unemployed individuals. The former group included millions of poorly educated, unskilled citizens who were unable to obtain and hold jobs in the private or public sectors (Wentzel, 1979).

The Economic Opportunity Act of 1964 (P. L. 88-452) was the landmark legislation of the Great Society Era which was aimed at increasing opportunities for everyone to receive education and training for work and to live in decency and dignity (Nystrom, 1973). Community agencies and

educational institutions in the public sector generally contracted with the U. S. Department of Labor to develop and implement training programs through these Statutes.

Efforts in the early 1960's focused on involving the community, providing immediate employment for the poor, and allowing representatives of the poor citizens to determine and implement service delivery systems. Local government, organized labor, and the private sector were rarely involved in the decision-making process.

Wentzel (1979) indicated that this lack of involvement was partially remedied in 1968.

Two separate organizations were established to represent the business and labor points of view in the manpower area. President Johnson, Henry Ford II, Paul Austin, Harold Greenen, John Harper and several dozen other business leaders founded the National Alliance of Businessmen (NAB) to act as the principal marketing arm for the U. S. Department of Labor in generating business involvement in MDTA programs for the unemployed poor. The other group was the Human Resources Development Institute (HRDI), which is affiliated with the AFL-CIO and represents the union movement in developing and conducting training programs for unskilled workers and unemployed Americans. Both NAB and HRDI worked their separate sides of the manpower "street" during most of the late 1960's and early 1970's, converging only once when they developed a "buddy system" program. (pp. 101-102)

Between 1968 and 1973 decisions regarding local unemployment problems were made semi-independently by community groups, employers, unions, school systems, HRDI, and NAB.

This lack of communication did not indicate that progress was not made. More than two million poor unemployed citizens were hired and trained by 100,000 employers through the efforts of NAB. Hundreds of thousands of unemployed and underemployed individuals received training through HRDI programs. In addition, local school systems

operated Neighborhood Youth Corps Programs which introduced hundreds of thousands of economically disadvantaged youth to the world to work. However, the non-communication resulted in efforts being duplicated and individuals being trained for unmarketable skills or being placed in jobs which were temporary at best (Wentzel, 1979).

The Nixon Administration sensed the frustration that existed in our Nation's cities and counties and proposed to transfer control of manpower programs to local governments. This proposal was accomplished in 1973 when Public Law 93-203, Comprehensive Employment and Training Act (CETA), was signed into law. This Act transferred decision-making control over employment and training activities supported by Federal funds to "local prime sponsors" who were selected by chief elected officials in more than 450 county and local jurisdictions (Evans, 1978; U. S. Department of Labor, 1979). Prime sponsors were granted considerable decision-making authority and they were required to appoint Manpower Planning Councils. These councils were to represent the entire community and they were expected to advise the prime sponsor on program needs and priorities (Wentzel, 1979).

Council memberships were to have represented all segments of the community; however, political appointments frequently resulted in a minority representation of business and labor. Consequently, employment and training activities were located in the public sector 95% of the time. The U. S. Department of Labor is continuing to encourage prime sponsors to develop local linkages between education, labor, government, and business. Logic indicated that private employers must be actively involved in the decision-making process regarding the expenditure of

more than \$11 billion through CETA prime sponsors to train and place their clients, since more than 80% of the jobs in the country are located in the private sector (Wentzel, 1979).

Comprehensive Employment and Training Act (CETA) (P. L. 93-203),
Youth Employment and Demonstration Projects Act (YEDPA) (P. L. 95-93),
and the Comprehensive Employment and Training Act Amendments (CETA)
(P. L. 95-524)

Recent legislation passed by the U. S. Congress mandated occupational opportunities and improvement of work skills for adults and youth who find it difficult to compete successfully in the labor market (U. S. Department of Labor, 1979). These laws included:

(1) Comprehensive Employment and Training Act (CETA) of 1973 (P. L. 93-203);

(2) Youth Employment and Demonstration Projects Act (YEDPA) of 1977 (P. L. 95-93); and

(3) Comprehensive Employment and Training Act Amendments of 1978 (P. L. 95-524).

Both CETA and YEDPA were primarily designed to serve out-of-school adults and youth 16 years of age and over; however, YEDPA also focused on economically disadvantaged students who are 14 years of age and older and enrolled in school.

In 1973, Congress passed the Comprehensive Employment and Training Act (CETA) (P.L. 93-203) in order to:

Provide job training and employment opportunities for economically disadvantaged, unemployed, or underemployed persons which will result in an increase in their earned income and to assure that training and other services lead to maximum employment opportunities. (Jones, Watts, & Downing, 1979, p. 5)

CETA was ultimately concerned with enabling economically disadvantaged youth and adults, handicapped persons, persons of limited English-speaking ability, women, single parents, displaced homemakers, and persons who lack educational credentials to secure unsubsidized employment in the private sector (Duxbury, 1975; U. S. Department of Labor, 1979). Service delivery systems including counseling, occupational information systems, on-the-job training, specific skill training, work experience, placement, and follow-up were authorized for CETA funding. An additional goal of CETA was to develop workable linkages between education, business and industry, and the United States Employment Service (Herr, 1979).

The Youth Employment and Demonstration Projects Act of 1977 (P. L. 95-93) was passed by Congress to allow prime sponsors to experiment for one year. It provided the opportunity and funding to apply new CETA-related approaches to young disadvantaged students who were 14 years of age and older and in school. Programmatically these approaches involved youth in conservation work, community improvement projects, year-round structured work experiences to encourage school completion, and unique employment and training services adopted to local needs (Jones, Watts, & Downing, 1979; Herr, 1979; Rossbach, 1978; U. S. Department of Labor, 1979).

Herr (1979) summarized YEDPA by stating:

The fundamental goal of YEDPA is both to increase employment for youth and increase preparation for later employment. The Act is also intended to coordinate and improve the quality of career development, employment and training services currently available for youth. The Act emphasizes research and experimentation to provide knowledge and information by which Congress might set long-term policies. (p. 177)

The Comprehensive Employment and Training Act Amendments of 1978 (P. L. 95-524) affected the provisions of CETA (Herr, 1979 and YEDPA (Jones, Watts & Downing, 1979). These Amendments reduced the utilization of public service employment, clarified the definition of economically disadvantaged, increased the Secretary of Labor's discretionary power, strengthened the role of local planning councils, increased the emphasis on research and experimentation, established local industry job councils to assist in the creation of jobs in the private sector, and placed a greater emphasis on American Indians as a target population (Herr, 1979).

CETA, YEDPA, and the CETA Amendments of 1978 represent a significant Federal commitment to reducing unemployment and to providing targeted populations with work experiences and skills necessary to compete in competitive employment. Individuals who are marginally employable, structurally unemployed, or economically disadvantaged will have the opportunity to benefit from the following CETA-based guidance services:

1. Job search, including counseling and referral
2. Outreach
3. Assessment
4. Skill training
5. On-the-job training
6. Entry-level public service opportunities
7. Payment of public or private employers
8. Allowances
9. Supportive services
10. Labor market information
11. Job development/restructure
12. Displaced homemaker assistance (Herr, 1979, p. 178)

America's Manpower Needs

vs

Training Needs of America's Citizens

The goals of vocational education came into focus early in the twentieth century. America was rapidly changing from an agrarian to an industrial society and schools were becoming aware of the need to train America's citizens for skilled occupations (Cross, 1975).

In 1917, this heightened awareness resulted in the Smith-Hughes Vocational Education Act (P. L. 64-347) and a continuing series of subsequent legislation at the Federal level. The Smith-Hughes Act clearly called for the development of a skilled work force limited to trade and industry, agriculture, home economics, the preparation of teachers, and the establishment of an administrative network to carry out this training. Whinfield (1975) stated "The rules set forth in the act (sic) at that time gave virtually no attention to meeting the needs of special groups except youth and adults" (p. 204).

The total lack of support for individual students was clearly stated by the Federal Board for Vocational Education (1917):

The Federal Board desires to emphasize the fact that vocational schools and classes are not fostered under the Smith-Hughes Act for the purpose of giving instruction to the backward, deficient, incorrigible, or otherwise subnormal individuals; but that such schools and classes are to be established and maintained for the clearly avowed purpose of giving thorough vocational instruction to healthy, normal individuals to the end that they may be prepared for profitable and efficient employment. Such education should command the best efforts of normal boys and girls. (p. 17)

Consequently, most states established programs which were specifically concerned with manpower needs.

In 1920, the U. S. Congress passed the Civilian Rehabilitation Act (P. L. 66-236) which charged state boards of vocational education with administration of vocational rehabilitation of physically handicapped citizens. Congress believed that these boards would be able to provide access to training programs, staff, and facilities in addition to developing effective vocational rehabilitation programs. This overall charge was expanded to include emotionally and mentally handicapped persons with the passage of the Vocational Rehabilitation Act Amendments (P. L. 75-113) of 1943 (Whinfield, 1975).

Administrative responsibility for vocational rehabilitation was removed from state boards of vocational education with the Vocational Rehabilitation Act Amendments (P. L. 89-263) of 1965. Whinfield (1975) stated:

It can be conjectured that this change occurred because the training component offered by vocational education was inadequate to serve the needs of vocational rehabilitation clients....Was the removal of that administrative responsibility the result of failure of vocational education to do an adequate job? (p. 201)

In support of this belief, Winfield (1975) stated the following quote from Oberman (1968):

The Federal Board for Vocational Education had never been highly enthusiastic about this new work with which it was charged. From the beginning, the staff of the Civilian Vocational Rehabilitation Division had had to carry on the struggle for the program, with little help from the top leadership of the Board...(p. 239)

The U. S. Congress finally recognized individual student needs by including financial support for guidance services in vocational education in the George-Bardeen Act (P. L. 73-586) in 1946. This Act emphasized the prevention of unemployment more than the training of workers to meet employers' needs (Cross, 1975).

Another segment of America's society was concerned with the overall progression of services which were being provided by vocational education. This faction, which sponsored legislation that was implemented through the Department of Labor, believed that disadvantaged citizens from poor socioeconomic backgrounds were being deprived of essential vocational training. This movement was spearheaded with the Manpower Development and Training Act (P. L. 87-415) in 1962. Numerous other statutes, culminating with the present Comprehensive Employment and Training Act Amendments (CETA) (P. L. 95-524), have expanded the provision of job training and employment opportunities to economically disadvantaged youth and adults, handicapped persons, persons of limited English-speaking ability, women, single parents, displaced homemakers, and persons who lack educational credentials to secure unsubsidized employment in the private sector (U. S. Department of Labor, 1979).

Federal legislation categorically identified high school dropouts; persons who have academic, socioeconomic, or other handicaps; persons with physical and emotional handicaps; and persons of limited English-speaking ability in the Vocational Education Act (P. L. 88-210) of 1963 and its' subsequent amendments (Whinfield, 1975). In 1968, Congress realized that the vocational needs of handicapped and disadvantaged individuals were not being met. Consequently, 10% and 15% of the total vocational education budget was earmarked for these respective groups in the Vocational Education Amendments (P. L. 90-576) of 1968. Congress intended the provision of special services for persons with handicaps or disadvantages which would prevent them from succeeding in regular vocational education programs.

It became even more apparent that Congress wanted more appropriate and specialized educational services for handicapped youth through 21 years of age, when they passed the Education for All Handicapped Children Act (P. L. 94-142) in 1975. This Act specifically included industrial arts, consumer and homemaking education, and vocational education (Halloran, Foley, Razeghi, & Hull, 1978).

This historical analysis has identified a continuum of legislative mandates which primarily concern themselves with the provision of vocational education and related services for all United States citizens. These legislative events indicate that members of the U. S. Congress, representing the wishes of their constituents, truly believed that special populations were being deprived of their educational rights. Consequently, the Federal mandates appear to have evolved into an issue of "equality".

The Equality-Inequality Issue in Vocational Education

In 1963, vocational educators, U. S. Office of Education personnel, and the U. S. Congress officially recognized the fact that significantly large numbers of citizens were not being served by vocational-technical educational programs across the country (Simcoe, 1979). Numerous legislative efforts over the past 60 years had attempted to get at the core of the "equality-inequality" problem. However, it was not until the passage of the Vocational Education Act of 1963 (P. L. 88-210) that the total profession was charged with the responsibility of meeting individualized needs of students who had academic, socioeconomic, or other handicaps which could prevent them from succeeding in regular vocational programs. Amendments to this Act ultimately set-aside 10%

of the total available funds for the handicapped and 15% for the disadvantaged in 1968 (P. L. 90-567) and increased the set-aside for the disadvantaged to 20% in 1976 (P. L. 94-482).

During this era it also became apparent that the programmatic needs of women and minorities were not being met in vocational education. Subsequently, the Civil Rights Act of 1964 (P. L. 88-352), Title IX of the Education Amendments of 1972 (P. L. 92-318), and Title II of the Education Amendments of 1976 (P. L. 94-482) were passed.

The issue of inequality related to the handicapped was further exemplified with the passage of the Rehabilitation Act of 1973 (P. L. 93-112) and the Education for All Handicapped Children Act of 1975 (P. L. 94-142). Additionally, numerous acts were passed and implemented through the Department of Labor which crossed all of these special populations. Each of these laws were directly or indirectly intended to eliminate discrimination or denial of services related to the acquisition of vocational skill training.

The equality-inequality dilemma related to the access of vocational programs apparently remains unsolved. Simcoe (1979) stated that this is especially true for disadvantaged citizens. Two studies conducted by Parsons, Hughes, and Rice (1975) and Walsh and Totten (1976) were cited by Simcoe (1979) which clearly indicated that a significant number of eligible disadvantaged students were not being served by vocational education. The impact of this lack of access, or availability to watered down or less effective curriculum, is evidenced by the facts that 70% of all high school dropouts and 78% of all correctional institution inmates are disadvantaged (Phillips, 1976).

The ultimate concern appears to be one of equity: Do all citizens have equal access to area vocational technical centers (AVTC's) and community colleges? Do they have equal access to specific programmatic areas? Do these vocational institutions and programs screen and selectively choose their students in an equitable manner?

Affirmative Action Admissions

The concepts of *equality in admissions* and *affirmative action admissions* have created a major debate in the United States. Concern over these issues has primarily been noted in the higher education arena (Kimball, 1978). The best known case was the *Regents of the University of California V. Allan Bakke*. In this incident, the University of California at Davis Medical School annually set aside 16 of 100 students slots for disadvantaged applicants between 1970 and 1974. Every individual admitted through this special admissions program was a minority group member (Bundy, 1977; Flygare, 1978).

Bakke applied for and was refused admission to the Davis Medical School in 1973 and in 1974. This program denial occurred even though his undergraduate grade-point average and Medical College Admission Test (MCAT) scores were significantly higher than those of individuals admitted under the Davis Medical School special admissions program (Flygare, 1978).

The Bakke Case originated in California's lower courts and was appealed several times until it finally reached the U. S. Supreme Court. The lower court found the program operating as a racial quota and ruled that race could not be used in admissions decisions; however Bakke's admission was not ordered. The Supreme Court of California affirmed this decision and ordered Bakke's admission. A final decision by the

U. S. Supreme Court affirmed Bakke's admission and invalidated the college's special admission program, but reversed prohibiting the college from taking race into account in future admissions decisions (New York State Library, 1978).

In the final analysis, the U. S. Supreme Court extinguished the use of the quota system, although it supported the use of race as one factor in developing a diversified student body (Bowen, 1977; Braveman, 1978). Flygare (1978) indicated that the Federal affirmative action regulations were not intended to and should not have been used to discriminate against any applicant or employee because of race, color, religion, sex, or national origin. The director of the Office of Civil Rights, Department of Health, Education, and Welfare wrote:

Colleges and universities are entitled to select the most qualified candidate, without regard to race, sex, or ethnicity, for any position. The college or university, not the federal government, is to say what constitutes qualifications for any particular position. No single appointment will be objected to where those not appointed are less well-qualified than the candidate actually selected. (Holmes, 1974)

Flygare (1978) cited a more recent interpretation of affirmative action plans by the Equal Employment Opportunity Coordinating Council (1976) which stated:

Selections under such plans should be based upon the ability of the applicant(s) to do the work. Such plans should not require the selection of the unqualified, or the unneeded, nor should they require the selection of persons on the basis of race, color, sex, religion, or national origin. (p. 38816)

Flygare (1978) indicated that affirmative action does not apply to student admissions and that the Federal government does not sanction preferential treatment of minority group members. The system never intended to create a preference for minorities and women.

Office of Civil Rights (OCR) Regulations
for Vocational Education Programs

Vocational counselors, instructors, and administrators have traditionally adhered to admissions or selection procedures and criteria which have been antiquated by the previously described Congressional Action. However, only since March 21, 1979 have guidelines for eliminating discrimination and denial of services on the basis of race, color, national origin, sex, and handicap (Office of Civil Rights, 1979) been available to authorities involved in the selection process.

These new Office of Civil Rights (OCR) regulations represent a capstone to the momentum created by the human rights movement of the 1960's. Ultimately they were intended to rapidly change vocational guidance practices which have evolved since the early 1900's (Kapes & Greenwood, 1979).

The OCR guidelines became effective on March 15, 1979 and specifically explained civil rights responsibilities of recipients of Federal funds offering or administering vocational education programs. These regulations were derived from and provide supplementary guidance to Title VI of the Civil Rights Act of 1964 (P. L. 88-352), Title IX of the Education Amendments of 1972 (P. L. 92-318), and section 504 of the Rehabilitation Act of 1973 (P. L. 93-112) as well as the Departmental implementation regulations for each of these Acts.

The Department of Health, Education, and Welfare issued the OCR guidelines in order to explain how civil rights laws and Department regulations apply to vocational education programs. The guidelines resulted from an injunctive order entered by the United States District Court for the

District of Columbia in *Adams v. Califano*. Evidence had been produced which demonstrated continuing unlawful discrimination in vocational education programs (Office of Civil Rights, 1979). In addition to issuing these guidelines, the Department was directed to enforce civil rights requirements in vocational programs through compliance reviews and a survey of enrollments and related data.

The Office of Civil Rights (1979) stated:

Many vocational education administrators engage in unlawfully discriminatory practices. They need additional guidance and support from the Department to meet their obligations under civil rights authorities. (p. 17162)

Compliance reviews conducted by OCR investigative staff from 1973 to 1978 consistently found the following civil rights violations in vocational schools:

1. Eligibility requirements such as residence within a geographic area or admissions tests deny vocational education opportunities on the basis of race, color, national origin and handicap;
2. Handicapped students are impermissibly assigned to separate annexes or branches: they are also denied equal vocational education opportunities as a result of inaccessible facilities and inadequate evaluation procedures;
3. Vocational schools established for students of one race, national origin or sex continue as essentially segregated facilities;
4. National origin minorities with limited proficiency in English are denied equal opportunity to participate in vocational programs;
5. Vocational education administrators often fail to adequately protect against discrimination in the placement of students with employers;
6. Faculty and staff are assigned to vocational programs on the basis of race, national origin, sex and handicap. (Office of Civil Rights, 1979, p. 17163)

Furthermore, reports from advocacy groups have identified other possible civil rights violations. The NAACP Legal Defense Fund alleged that State agencies engage in unlawful discrimination against urban areas in the allocation of Federal Vocational Education funds (Office of Civil Rights, 1979).

The OCR guidelines were developed with the expectation that they would contribute to bringing an end to unlawful discrimination against persons seeking skills necessary for gainful and meaningful employment. Major areas of responsibility covered by these regulations include:

- I. Scope and Coverage
- II. Responsibilities Assigned Only to State Agency Recipients
- III. Distribution of Federal Financial Assistance and Other Funds for Vocational Education
- IV. Access and Admission of Students to Vocational Education Programs
- V. Counseling and Prevocational Programs
- VI. Equal Opportunity in the Vocational Education Instructional Setting
- VII. Work Study, Cooperative Vocational Education, Job Placement, and Apprentice Training
- VIII. Employment of Faculty and Staff
- IX. Proprietary Vocational Education Schools

The present study was primarily concerned with issues related to Section IV. Subsequently these regulations are being presented in their entirety.

IV. ACCESS AND ADMISSION OF STUDENTS TO

VOCATIONAL EDUCATION PROGRAMS

A. Recipient Responsibilities

Criteria controlling student eligibility for admission to vocational education schools, facilities and programs may not unlawfully discriminate on the basis of race, color, national origin, sex, or handicap. A recipient may not develop, impose, maintain, approve, or implement such discriminatory admissions criteria.

B. Site Selection For Vocational Schools

State and Local recipients may not select or approve a site for vocational education facility for the purpose or with the effect of excluding, segregating, or otherwise discriminating against students on the basis of race, color, or national origin. Recipients must locate vocational education facilities at sites that are readily accessible to both nonminority and minority communities, and that do not tend to identify the facility or program as intended for nonminority or minority students.

C. Eligibility For Admission To Vocational Education Centers Based On Residence

Recipients may not establish, approve or maintain geographic boundaries for a vocational education center service area or attendance zone, (hereinafter "service area"), that unlawfully exclude students on the basis of race, color, or national origin. The Office for Civil Rights will presume, subject to rebuttal, that any one or combination of the following circumstances indicates that the boundaries of a given service area are unlawfully constituted:

1. A school system or service area contiguous to the given service area, contains minority or nonminority students in substantially greater proportion than the given service area;
2. A substantial number of minority students who reside outside the given vocational education center service area, and who are not eligible for the center reside, nonetheless, as close to the center as a substantial number of non-minority students who are eligible for the center;
3. The over-all vocational education program of the given service area in comparison to the over-all vocational education program of a contiguous school system or service area enrolling a substantially greater proportion of minority students: (a) provides its students with a broader range of curricular offerings, facilities and equipment; or (b) provides its graduates greater opportunity for employment in jobs: (i) for which there is a demonstrated need in the community or region; (ii) that pay higher entry level salaries or wages; or (iii) that are generally acknowledged to offer greater prestige or status.

D. Additions and Renovations To Existing

Vocational Education Facilities

A recipient may not add to, modify, or renovate the physical plant of a vocational education facility in a manner that creates, maintains, or increases student segregation on the basis of race, color, national origin, sex, or handicap.

E. Remedies For Violations of Site Selection

And Geographic Service Area Requirements

If the conditions specified in paragraphs IV, A, B, C, OR D, immediately above, are found and not rebutted by proof of nondiscrimination, the Office for Civil rights (sic) will require the recipient(s) to submit a plan to remedy the discrimination. The following are examples of steps that may be included in the plan, where necessary to overcome the discrimination: (1) redrawing of the boundaries of the vocational education center's service area to include areas unlawfully excluded and/or to exclude areas unlawfully included; (2) provision of transportation to students residing in areas unlawfully excluded; (3) provision of additional programs and services to students who would have been eligible for attendance at the vocational education center but for the discriminatory service area or site selection; (4) reassignment of students; and (5) construction of new facilities or expansion of existing facilities.

F. Eligibility For Admission To Secondary

Vocational Education Centers Based On

Numerical Limits Imposed on Sending Schools

A recipient may not adopt or maintain a system for admission to a secondary vocational education center or program that limits admission to a fixed number of students from each sending school included in the center's service area if such a system disproportionately excludes students from the center on the basis of race, sex, national origin or handicap. (Example: Assume 25 percent of a school district high school students are black and that most of those black students are enrolled in one high school; the white students, 75 percent of the district's total enrollment, are generally enrolled in the five remaining high schools. This paragraph prohibits a system of admission to the secondary vocational education center that limits eligibility to a fixed and equal number of students from each of the district's six high schools.)

G. Remedies for Violation of Eligibility

Based on Numerical Limits Requirements

If the Office for Civil Rights finds a violation of paragraph F. above, the recipient must implement an alternative system of admissions that does not disproportionately exclude students on the basis of race, color, national origin, sex, or handicap.

H. Eligibility for Admission to Vocational

Education Centers, Branches or Annexes

Based Upon Student Option

A vocational education center, branch or annex, open to all students in a service area and predominantly enrolling minority students or students of one race, national origin or sex, will be presumed unlawfully segregated if: (1) it was established by a recipient for members of one race, national origin or sex; or (2) it has since its construction been attended primarily by members of one race, national origin or sex; or (3) most of its program offerings have traditionally been selected predominantly by members of one race, national origin or sex.

I. Remedies for Facility Segregation Under

Student Option Plans

If the conditions specified in paragraph IV H are found and not rebutted by proof of nondiscrimination, the Office for Civil Rights will require the recipient(s) to submit a plan to remedy the segregation. The following are examples of steps that may be included in the plan, where necessary to overcome the discrimination: (1) elimination of program duplication in the segregated facility and other proximate vocational facilities; (2) relocation or "clustering" of programs or courses; (3) adding programs and courses that traditionally have been identified as intended for members of a particular race, national origin or sex to schools that have traditionally served members of the other sex or traditionally served persons of a different race or national origin; (4) merger of programs into one facility through school closings or new construction; (5) intensive outreach, recruitment and counseling; (6) providing free transportation to students whose enrollment would promote desegregation.

(Paragraph J omitted)

K. Eligibility Based on Evaluation of Each

Applicant Under Admissions Criteria

Recipients may not judge candidates for admissions to vocational education programs on the basis of criteria that have the effect of disproportionately excluding persons of a particular race, color, national origin, sex, or handicap. However, if a recipient can demonstrate that such criteria have been validated as essential to participation in a given program and that alternative equally valid criteria that do not have such a disproportionate adverse effect are unavailable, the criteria will be judged nondiscriminatory. Examples of admissions criteria that must meet this test are past academic performance, record of disciplinary infractions,

counselors' approval, teachers' recommendations, interest inventories, high school diploma and standardized tests, such as the Test of Adult Basic Education (TABE). An introductory, preliminary, or exploratory course may not be established as a prerequisite for admission to a program unless the course has been and is available without regard to race, color, national origin, sex, and handicap. However, a course that was formerly only available on a discriminatory basis may be made a prerequisite for admission to a program if the recipient can demonstrate that: (a) the course is essential to participation in the program; and (b) the course is presently available to those seeking enrollment for the first time and those formerly excluded.

L. Eligibility of National Origin Minority

Persons with Limited English Language Skills

Recipients may not restrict an applicant's admission to vocational education programs because the applicant, as a member of a national origin minority with limited English language skills, cannot participate in and benefit from vocational instruction to the same extent as a student whose primary language is English. It is the responsibility of the recipient to identify such applicants and assess their ability to participate in vocational instruction.

Acceptable methods of identification include: (1) identification by administrative staff, teachers, or parents of secondary level students; (2) identification by the student in postsecondary or adult programs; and (3) appropriate diagnostic procedures, if necessary.

Recipients must take steps to open all vocational programs to these national origin minority students. A recipient must demonstrate that a concentration of students with limited English language skills in one or a few programs is not the result of discriminatory limitations upon the opportunities available to such students.

M. Remedial Action in Behalf of Persons

With Limited English Language Skills

If the Office for Civil Rights finds that a recipient has denied national origin minority persons admission to a vocational school or program because of their limited English language skills or has assigned students to vocational programs solely on the basis of their limited English language skills, the recipient will be required to submit a remedial plan that insures national origin minority students equal access to vocational education programs.

N. Equal Access For Handicapped Students

Recipients may not deny handicapped students access to vocational education programs or courses because of architectural or equipment barriers, or because of the need for related aids and services or auxiliary aids. If necessary, recipients must: (1) modify instructional equipment; (2) modify or adapt the manner in which

the courses are offered; (3) house the program in facilities that are readily accessible to mobility impaired students or alter facilities to make them readily accessible to mobility impaired students; and (4) provide auxiliary aids that effectively make lectures and necessary materials available to postsecondary handicapped students; (5) provide related aids or services that assure secondary students an appropriate education.

Academic requirements that the recipient can demonstrate are essential to a program of instruction or to any directly related licensing requirement will not be regarded as discriminatory. However, where possible, a recipient must adjust those requirements to the needs of individual handicapped students.

Access to vocational programs or courses may not be denied handicapped students on the ground that employment opportunities in any occupation or profession may be more limited for handicapped persons than for non-handicapped persons.

O. Public Notification

Prior to the beginning of each school year, recipients must advise students, parents, employees and the general public that all vocational opportunities will be offered without regard to race, color, national origin, sex, or handicap. Announcement of this policy of non-discrimination may be made, for example, in local newspapers, recipient publications and or other media that reach the general public, program beneficiaries, minorities (including national origin minorities with limited English language skills), women, and handicapped persons. A brief summary of program offerings and admission criteria should be included in the announcement; also the name, address and telephone number of the person designated to coordinate Title IX and Section 504 compliance activity.

If a recipient's service area contains a community of national origin minority persons with limited English language skills, public notification materials must disseminated to that community in its language and must state that recipients will take steps to assure that the lack of English language skills will not be a barrier to admission and participation in vocational education programs. (Office of Civil Rights, 1979, pp. 17165 - 17167)

Specific regulations of significant importance have been presented in this section of the OCR guidelines on access and admission of students to vocational education programs. Implications for vocational administrators, counselors, and instructors are clear. A need exists for the identification of admissions criteria which do not discriminate against individuals and deny services in vocational education on the basis of race, color, national origin, sex, or handicap.

According to the new OCR regulations, institutions offering public occupational education programs may not use geographic boundaries which unlawfully exclude students on the basis of race, color, or national origin. Nor may they utilize a system which limits admission to a fixed number of students from each sending school or institution in a service area, if such a system disproportionately excludes students on the basis of race, sex, national origin, or handicap. In addition, recipients of Federal funds may not judge candidates for admission to public occupational education programs on the basis of criteria that have the effect of disproportionately excluding persons of a particular race, color, national origin, sex, or handicap (Office of Civil Rights, 1979).

The OCR guidelines further indicated that the following admissions criteria should only be used if they do not disproportionately exclude students on the basis of race, color, national origin, sex, or handicap (unless they are shown to be empirically valid):

1. Academic performance
2. Record of disciplinary infractions
3. Counselors' approval
4. Teachers' recommendations
5. Interest inventories
6. High school diploma
7. Standardized tests
8. Prerequisite course(s)

Admissions standards, which disproportionately exclude any population, may only be used if they have been previously validated as essential to participation in a given program and if other alternative equally

valid criteria that do not have such a disproportionate adverse effect are unavailable.

In addition, public occupational education programs may not restrict admission to national origin minority students with limited English language skills, who they believe cannot participate in and benefit from vocational instruction to the same extent as a student whose primary language is English. Nor may handicapped students be denied access to vocational programs because of architectural or equipment barriers, or because of the need for related services or auxiliary aids.

Commonly Used Admissions Criteria

The Office of Civil Rights (1979) published regulations which they believed would contribute to bringing an end to unlawful discrimination against persons seeking the skills necessary for gainful and meaningful employment. Therefore, it is imperative to review admissions criteria which are frequently used by recipients of Federal funds to determine who may or may not enter vocational programs. A vast majority of the standards, which were reviewed in this literature search, appear to have the potential of discriminating against individuals and denying services on the basis of race, color, national origin, sex, or handicap.

The National Center for Research in Vocational Education (1978) listed the following typical criteria for identifying cooperative vocational education students:

- desire to participate
- have a tentative career objective
- have a sincere desire to learn a trade or occupation in the service area in which he/she is applying
- desire to work or train further in that occupation after graduation
- have the potential to benefit from on-the-job training
- have the aptitude to study the related course content

- have an acceptable scholastic record
- have an acceptable attendance record
- have the personal traits and attitudes necessary to obtain and maintain initial employment
- be neat and attractive
- have the ability to get along well with others
- be willing to accept responsibility
- be willing to follow instructions
- have the potential to represent the school well
- be responsible for his/her own transportation to and from work
- have adequate time available for full participation
- be at least 16 years of age
- have parental permission (p. 21)

However, the author stated that the teachers need to develop criteria which are general enough to include students who want to participate and can benefit from the program, but who need help in developing the skills or traits listed in the criteria.

Directors of 21 vocational-technical schools in New Jersey were interviewed in order to ascertain their admissions requirements (Simcoe, 1979). Every area vocational school in the sample screened applicants on their previous academic achievement, attendance, and in-school behavior or discipline records. Implementation of these procedures essentially put a de facto segregation practice into operation. Disadvantaged youth were being rejected by the same criteria which have been utilized to categorize them as educationally disadvantaged in the first place.

Simcoe (1979) reported:

While grade level achievement in reading and mathematics was desirable--even essential--only one school applied a firm "cut-off" score in either reading or mathematics....Most schools, however, did use reading and mathematics scores for placement and counseling, and poor achievement scores often limited a student's choice of shops. For example, disadvantaged minority youngsters experience considerable difficulty gaining access to the technical areas such as electronics and practical nursing, areas in which poor preparation in mathematics and reading have been identified by school personnel as barriers to success. (pp. 42-43)

McClure (1977) stated that vocational schools are frequently thought of as open enrollment institutions. However, she indicated that this is rarely the case, especially in better vocational schools with more sophisticated programs. The following admissions criteria, which often confront students seeking vocational preparation, were listed by McClure:

- (1) previous academic record, (2) school attendance records, (3) a record of suspension or other disciplinary acts, (4) I. Q. tests, (5) aptitude test performance, (6) vocational interest inventories, (7) a high school diploma or its equivalent, (8) union apprenticeship, (9) inquiries concerning marital status, dependents, and financial support, (10) pregnancy and (11) course prerequisites. (pp. 19-20)

Research efforts are needed to empirically validate student selection and admissions criteria. Discrimination against protected group persons tends to evolve through the lack of effective validation procedures.

Kapes and Greenwood (1979) indicated that selecting unbiased instruments, collecting valid data, and accurately predicting success in training or on-the-job invoke a series of significant problems on researchers as well as the practitioners. They stated that enrollment in oversubscribed programs is often determined by grades, attendance, past achievement, teachers' recommendations, attitude and numerous other nebulous and difficult to measure characteristics.

A survey of postsecondary institutions in the state of Washington revealed that specific testing for course placement is common practice among community colleges. This study also stated that standardized or locally-developed reading, English, and mathematics tests are often used for course placement. In addition, the report indicated that vocational programs in health services have established minimum standards for program entrance (Venneri, 1978).

A Florida vocational-technical center reported using reading comprehension as the basis for their screening process (Perry, 1978). Perry stated, "An admissions policy can be developed that admits all those students who are prepared to learn, identifies those who require compensatory instruction, and channels both into appropriate programs" (p. 18). Stated advantages of this system included not diluting instructional effort, physical safety of the students, identification of individuals who require special preparation and attention, ensuring a readiness to learn, and selection of students who can work more independently.

Perry (1978) reported that admissions policies must be based upon a valid predictive measure. However, the only support presented for this decision-making model was the statement that "research shows that the single most valid predictor of success in the classroom and on the job is the student's ability to comprehend what s(he) reads" (p. 17).

This vocational-technical center established regular and preparatory cut-off scores for all of their program areas. In each case, the preparatory scores were two grade levels lower than the regular admission cut-off scores. Cut-off scores were determined by analyzing the difficulty level (reading level) of the learning materials in each occupational program.

An eighth grade reading achievement level was required for regular admission to the carpentry, food services, horticulture, and small engine mechanics programs. Subsequently, students functioning at the sixth grade level could be granted preparatory admission to these programs. These students would be required to take from 0 to 2 hours of remedial reading on a daily basis. Students whose reading achievement levels

were lower than the sixth grade level were apparently placed as special admissions in full-time classes for basic skills instruction. In this setting, special admissions could receive further diagnostic testing in work evaluation.

In summary, Perry (1978) stated:

A valid and objective method for selecting applicants who can profit from occupational instruction should be the basis for using any screening criteria....Applying selection criteria based on basic skills achievement identifies those individuals who will need additional help to derive the most from their training and become employable. This type of screening is consistent with statutes and state [Florida] board of education regulations. (p. 19)

It should be noted that the practices identified by Perry were developed and used at least one year prior to the passage of the recent OCR regulations. The practices outlined here exemplify a situation and are not intended to identify any one school or program.

Several references (Kapes & Greenwood, 1979; McClure, 1977; Perry, 1978; Simcoe, 1979), which were cited in this review of the literature, have established the concern for being able to predict the success of individual students in specific programs. Apparently there is a trend which finds public occupational education programs extensively focusing on the prediction of success.

McClure (1977) indicated how acute the competition may become when several students are seeking admission to a program with a limited number of openings. She stated that they often have to present evidence of good scholastic attainment, exemplary deportment, and interest. Criteria of this type tend to allow some vocational schools to be very elite institutions.

School administrators have the luxury of selecting those students whom they believe, by their definition, will be successful. Minorities and females who may be perceived to have "special needs" or to be students who will not "fit in" to the school's elitist image of itself will be screened out. (McClure, 1977, p. 22)

McClure (1980), an employee of the NAACP Legal Defense and Educational Fund, stated that the "success" standard for validating student admission criteria was specifically rejected in the Office of Civil Rights (1979) Final Guidelines because of comments they received.

Comment 42 from the OCR (1979) Final Guidelines stated:

42. Comment: Commenters suggested that the proposed validation standard of paragraph IV K would permit recipients to use criteria that disproportionately exclude minorities or handicapped persons merely by demonstrating that the students admitted were more likely to succeed in the program. This would allow recipients, for example to exclude protected persons from the attractive trade and technical programs through evidence that a "C" average student is less likely to excel in a program than an "A" average student. The Commenters suggested that screening criteria to be permissible, must be "essential to participation" in a program. (p. 17172)

McClure's (1980) concluding thoughts on this issue were:

The use of the "success" standard would have perpetuated the "creaming off" of the so-called "best" students to the exclusion of those who could learn the skills for a particular trade just as adequately as the "best" in the class. This "creaming off" effect of admissions criteria has an adverse impact on minorities, the handicapped, and women, a condition which the OCR guidelines now declare unlawful. (p. 6)

McClure continued by quoting the final sentence of the OCR (1979) response to Comment 42.

Response: This suggestion is accepted. One of the principal objectives of the Vocational Education Act is to provide protected group persons the training they need to obtain employment. Screening criteria or standards that have the effect of disproportionately excluding such persons from vocational education programs must therefore be validated as essential to satisfactory completion of course requirements. The use of criteria like grade point average, to justify priority admission of students with exceptional attainments or scores may disproportionately exclude protected group persons. If such disproportionately exclude protected group persons. If such disproportionate exclusion occurs the criteria or standards must be validated as essential to participation in a program before they may be used by a recipient. (p. 17172)

Necessary Admissions Criteria and
Policy Must Be Open to the Public

Regular vocational education programs have been charged by the Federal government to review their requirements for eligibility and placement practices to insure that they do not discriminate against protected group persons (Davis & Ward, 1978; Office of Civil Rights, 1979). Local educational agencies and vocational centers are entering an era which requires the examination of all program entrance requirements and consideration of the following questions:

1. Are the criteria nondiscriminating measures of success in the program? Or do the criteria "cream off" the so-called "best" students to the exclusion of those who could learn the skills for a particular trade just as adequately as the "best" in the class (McClure, 1980)?

2. Could other experiences be substituted for a particular requirement?

3. Are all students required to meet the same eligibility requirements?

4. What training can be provided to prepare students to meet entrance requirements (Albright, 1979; Davis & Ward, 1978)?

5. Have admissions criteria been validated as essential to participation in a program before they were used if they disproportionately exclude protected group persons from vocational education programs (Office of Civil Rights, 1979)?

Kraft (1977) suggested that compliance with the OCR guidelines can be enhanced by adhering to due process, by carefully enunciating admissions criteria, and by placing requirements for eligibility on public view.

Gellhorn and Hornby (1974) made the following six recommendations, which would enable a program to reform their admissions processes and to conform with a higher standard of due process:

1. Well-articulated and publicly disseminated standards of admission;
2. Criteria validated for the stated educational objectives;
3. A system of challenges to the criteria;
4. A statement of reasons for rejection (when requested by the rejectee);
5. A right to see and challenge extra-record information; and
6. A right to informal hearing when facts are disputed.

Kraft (1977) formed a strong case for openness, which he believes is both desirable and feasible, by stating:

Openness in public administration is valuable and helpful for a number of general reasons. It educates the citizenry and protects their right to know what is being done in their name. It promotes a clearer definition of standards in decision-making, as well as consistency in the application of those standards. It can protect against abuses stemming from absolute and uncontrolled discretion. Also, openness has the function of draining off suspicion, resentment, distrust, and the like. (p. 60)

If an open hearing process is utilized, confidentiality can be safeguarded by having all applicants referred to by number rather than name.

The ideal selection or placement process would allow students the freedom to change from one level of class to another. After a few weeks of instruction, individuals could decide to seek higher or lower competency level classes or change programs altogether. These decisions could then be based on actual performance rather than past historical data in a different educational environment at a different level of

of maturity. Primary costs of this kind of flexibility are in schedule changes, record keeping, and faculty attitudes as class rosters change (State University of New York, 1977).

There are two final methods of dealing with oversubscribed programs if the administration decides not to use admissions criteria. Either programs can be expanded to allow unlimited enrollment which would be both costly and impractical or a lottery system could be implemented to solve the problem (Kapes & Greenwood, 1979).

Summary

As stated in the introduction to this literature review, more than six decades have passed since the U. S. Federal Government formally recognized the need for providing its citizenry with the opportunity to acquire vocational skills. Subsequently, our Nation's goals, to have all Americans live meaningful and productive lives and to have each citizen engage in gainful remunerative employment, continue to move along a dynamic continuum of legislative mandates (Cross, 1975).

As would be expected, leaders across this vast country of ours have differing opinions about how equitably vocational education programs are being offered to all United States citizens. Whether or not protected groups of persons are now being discriminated against is a current major educational issue.

Evans (1978) stated that members of almost every minority group and women have faced long-standing discrimination in training and employment. This appears to be the case even though civil rights legislation and landmark court cases have decided that "separate but equal" education was not satisfactory for any specified group. "Vestiges of the

'separate but equal' mentality remain" (Evans, 1978, p. 27). He indicated that Congressional efforts have been striving to ensure equal opportunity for all U. S. citizens wanting to acquire vocational skills.

However, he stated:

This determination flies in the face of the natural inclination of most educators and most employers to choose those who are trained most easily, and to discard or segregate or give lower priority to those who require more time, skill, resources and effort to develop. (p. 27)

Taggart and Wurzburg (1978) expressed quite similar concerns:

While vocational education has served enrolled students well, it has not reached out to all the students who need vocational services. There is a growing minority of young adults who face a chronic struggle in their attempts to find jobs and who, without some kind of intervention, face a work life of intermittent employment in low-paying jobs requiring minimal skills. (p. 42)

Florida's vocational educators have placed a high priority on the goal of equal opportunity for all students. The State's philosophy has been one of equal access for all people in vocational education (Mills, 1980). Joe D. Mills (1980), State Director of Vocational Education stated:

Despite accusations of some special groups to the contrary, vocational education has an enviable historical record of open access to programs, services, and activities. In fact, vocational education was one of the first educational fields to address many equity issues....Students choose vocational education for many reasons--personal interests or capability, peer influence, financial considerations, etc. It has never been accepted vocational practice to influence students to enroll in programs contrary to their individual interests or abilities. (Mills, 1980, p. 9)

Administrators, teachers, counselors and other personnel associated with vocational education programs may morally and philosophically be in agreement with the Office of Civil Rights (1979) Final Guidelines and legislation which led to the creation of these regulations. These

individuals may want nondiscriminatory vocational education programs which are equally accessible for all students. However, they may not possess the necessary background and knowledge to fully implement the OCR guidelines as they were intended.

Perhaps when school personnel are fully apprised of how to utilize specific selection criteria and standards, as specified in the OCR regulations, they will implement student selection models which are consistent with their supportive personal philosophies (Kohlberg, 1963; Sullivan, 1975). Receptivity to educational change is more likely when based on moral arguments, and moral arguments are more effective with school personnel when buttressed by legal mandates (Semmel, Gottlieb, & Robinson, 1979). Subsequently, public documents and workshops could be developed which focus on relevant information surrounding selection criteria as well as a model for effectively applying the OCR guidelines.

Chapter III

PROCEDURE

Introduction

The problem investigated in this study was undertaken in two related phases. Phase one was an exploratory activity to determine a representation of the current admission standards, criteria, and practices in use by three public occupational education delivery systems in Florida. This phase also included the identification of decision-making procedures used for admitted students who have been placed on a waiting list which will eventually allow them to enter a specific programmatic area of study. Information acquired in this phase was utilized to develop the public occupational education admission equity opinionnaire, which was used in the second phase of the research project.

The second phase of this study was undertaken in order to determine the degree of equity of a composite listing of standards, criteria, and practices which could be utilized to admit students to public occupational education programs. In addition, this phase of the study sought to determine the degree of equity of the same composite listing as it may be applied to the decision-making process for students who have been placed on waiting lists in order to enter specific programmatic areas of study of their choice. In both of these areas, the degree of equity was determined through an analysis of the respondents' opinions of the composite listing of standards, criteria, and practices.

Design of the Study

The following procedural outline represents the formal plan utilized in conducting this study:

Phase I

- A. Identification of institutions in the population.
- B. Establishment of a sampling procedure.
- C. Development of a research instrument.
- D. Collection of data.
- E. Analysis of data.

Phase II

- A. Development of a research instrument.
 - 1. Review of data collected in Phase I of the study.
 - 2. Review of related literature.
 - 3. Validation of instrument by a panel of experts.
- B. Determination of the composition of the population.
- C. Identification of mailing lists for the population.
- D. Establishment of a sampling procedure.
- E. Collection of data.
- F. Analysis of data.
- G. Completion of the research report.

Specific procedures used in various phases of this study are reported separately in the remainder of this chapter.

Phase I

Population and Sample

The population used in this phase of the study consisted of a randomly selected representative sample of public occupational education administrators in Florida. These administrators were institutionally categorized in the following manner: (1) AVTC directors, (2) community college administrators responsible for directing non-degree vocational education programs and, (3) CETA directors of training programs offered under Title II B and Title III of the Comprehensive Employment and Training Act as amended in 1978.

The geographic boundaries of the five Regional Offices for Program Implementation in Florida were used as guidelines for further structuring the sample in this phase of the study. A review of the number of institutions/programs offered by AVTC, community college and CETA programs in each region resulted in the use of a proportional sample distribution by regions. This proportional composition included two AVTC's, two community colleges, and four CETA programs in each of the five regional areas. A random identification procedure was used in the selection of all members of the sample. All selections were made from the following listings:

1. AVTC Personnel

1979-80 Florida Education Directory, Area Vocational-
Technical Centers administered by District School Boards.
(pp. 105-106)

2. Community College Personnel

1979-80 Florida Education Director, Area Vocational Education Schools administered by community/junior colleges. (pp. 108-109)

3. CETA Personnel

Listing of CETA prime sponsorships and training programs offered under Title II B and/or Title III of the Comprehensive Employment and Training Act as amended in 1978.

The listings described above were obtained through a mail solicitation. Copies of the letters of request which were mailed to the directors of CETA prime sponsorships and the directors of the five Regional Offices for Program Implementation in Florida to identify appropriate programs in operation are included in Appendix A.

The Research Instrument

A one page questionnaire was specifically designed to aid the collection of data for this phase of the study. The items of this questionnaire were specifically designed to provide: (1) the identification of a contact person from each institution, (2) a listing of generic admission standards and/or procedural guidelines used by each institution, (3) a listing of any additional admission standards or procedural guidelines which may be in use by specific occupational program areas at each institution, (4) a listing of occupational program areas which had waiting lists of admitted students, and (5) a listing of institutional or program area procedural guidelines which were followed in order to process

students on waiting lists. A copy of the questionnaire and transmittal letter sent to AVTC and community college administrators as well as the transmittal letter sent to CETA program directors is included in Appendix A. All institutions surveyed received the same questionnaire.

A degree of confusion was encountered in the determination of data sought from some of the CETA program administrators. From follow-up telephone conversations with these administrators it was determined that specialized testing and placement procedures, in addition to basic entry regulations specified in CETA legislation, were used by some of the placement services operated by various prime sponsorships. These placement activities were undertaken in order to provide more effective counseling and program placement for CETA students. The exact nature of these testing and placement procedures were, however, not always known by some of the individual program administrators. Several individual transmittal letters were sent along with accompanying questionnaires after these follow-up telephone inquiries. A representative sample of these individual transmittal letters are included in Appendix A.

The total number of returns received as well as the number of participants included in this phase of the study are listed in Table 1.

The admission standards identified as a result of this phase of the study are reported in detail in Chapter IV of this report. A categorical description of this information is reported in the research instrument section within the Phase II report of this chapter.

TABLE 1
Responses to the Phase I Questionnaire

	Initial Mailing	Number Returned	Second Mailing	Number Returned	Total Number Returned	Total Percent Returned
AVTC Directors	10	8	NA	NA	8	80%
Community College Administrators	10	9	NA	NA	9	90%
CETA Program Directors	20	10	7	7	17	85%
TOTALS	40	27	7	7	34	85%

Phase IIPopulation and Sample

The population used in this phase of the study consisted of a randomly selected representative sample of individuals associated with occupational education in Florida and members of selected advocacy groups in Florida. Four hundred and forty individuals surveyed in this phase of the study were categorized in the following manner:

(1) AVTC administrators, counselors and instructors; (2) community college administrators, counselors and instructors of non-degree occupational education programs; (3) CETA program administrators and instructors; (4) advisory council members for occupational education programs; and, (5) advocacy group members. The types of advocacy groups selected for this study included organizations concerned with: (1) blacks, (2) hispanics, (3) women, (4) handicapped, and (5) disadvantaged individuals.

Mailing lists which included the individuals surveyed in this study were obtained through a series of telephone requests and from information received as a result of phase one of the study. A statewide listing of occupational education counselors and instructors was obtained from the American Vocational Association through a request processed by the Florida Vocational Association. The Florida State Advisory Council on Vocational and Technical Education provided a listing of AVTC directors and community college occupational education administrators as well as a statewide listing of local occupational education advisory council members. Listings received through the first phase of the study were

used for contacting administrators and instructors of CETA programs. Listings of advocacy group members were obtained through individual telephone inquiries by project co-directors. The specific names of the advocacy groups surveyed in this study will not be reported. This is due to requests for anonymity received during most of the telephone inquiries with these organizations.

All selections of the sample surveyed in this phase of the study were identified in a randomized fashion. No provisions were made to include a follow-up mailing to nonrespondents. Code numbers on the opinionnaire necessary for such an activity may have introduced a level of concern for anonymity by the respondents.

A number (N=63) of surveys sent out were returned marked as non-deliverable by the Post Office. The largest number of these (N=26) were from the advisory council category of the sample surveyed. This high number was later attributed to the age of that particular mailing list. It was developed in 1977 for use in another study by the Florida State Advisory Council on Vocational and Technical Education which involved a survey design. Although somewhat dated, this list was the only such compilation of persons in this category which was readily available.

There was a 45.89% overall response rate from the survey. The actual number and categorical composition of the sample surveyed in this phase of the study is presented in Table 2.

TABLE 2
Sample Surveyed in Phase II of the Study

Category by Institution or Affiliation	Number Surveyed	Number of Returned as Non-Deliverable	*Number Included in Adjusted Survey	**Number of Usable Returns	Percent of Usable Returns
AVTC	140	7	133	118	88.72%
CETA	75	5	70	8	11.40%
Community College	75	11	64	18	28.13%
Advisory Council	75	26	49	19	38.78%
Advocacy Groups	75	14	61	10	16.39%
TOTALS	440	63	377	173	+45.89%

* This number was obtained by subtracting the number of persons initially surveyed from the number of surveys returned by the Post Office as non-deliverable, address unknown or incorrect address.

** There were 4 opinionnaires returned which were not complete.

+ The total row and column percentages vary by .01% due to error introduced by rounding.

A low response rate such as obtained without the use of a follow-up mailing to nonrespondents is typical. Kerlinger (1973) has indicated that responses to mailed questionnaires are generally low and that return rates of less than forty or fifty percent are common. Oppenheim (1966) listed a low response rate as the major disadvantage of any survey using a mailed questionnaire. Moser and Kalton (1972) described the nonrespondent as a problem which no investigator of human populations using a mailed questionnaire can escape.

The Research Instrument

A three part research instrument, referred to as the public occupational education admission equity opinionnaire, was specifically designed for this research project. Items included on this opinionnaire were developed to collect and categorize data which could readily be used to test the hypotheses of this study.

Items included in Part A were of a demographic nature. Information yielded by them categorized the respondents' institutional or group affiliation, as well as their professional title or role category.

The items in Part B were utilized to determine the degree of equity, based on respondents' opinions, of nineteen factors which could be used for initial admission or program area admission of students seeking occupational education. A 5 - point Likert-type scale with a low of one and a high of five was used for rating these factors.

Items identical to those used in Part B were utilized in Part C to determine the degree of equity, based on respondents' opinions of nineteen factors which could be used for students who have been accepted for admission but who were placed on a waiting list for actual program entry. A 5 - point Likert-type scale with a low of one and a high of five was used for rating these factors.

A Likert-type scale was selected for Parts B and C of this instrument due to its ability to provide precise information on opinions. Oppenheim (1966) stated:

The Likert scales tend to perform very well when it comes to a reliable, rough ordering of people with regards to a particular attitude. Apart from their relative ease of construction, these scales have two other advantages: first, they provide more precise information about the respondent's degree of agreement or disagreement . . . , second, it becomes possible to include items whose manifest content is not obviously related to the attitude in question, so that the subtler and deeper ramifications of an attitude can be explored (p. 141).

Development of items used in this opinionnaire resulted from data collected in phase one of this study as well as through selected findings identified in a comprehensive review of related literature. Items which were identified through the findings of phase one of this study included:

1. Standardized aptitude test scores.
2. Previous overall grade point average.
3. Individual interviews by counselors and/or instructors.
4. Standardized achievement test scores.
5. Existing geographic boundaries and/or sending school boundaries.

6. Recommendations by others
7. Standardized interest inventory test scores.
8. Admission preference given to low enrollment program areas.
9. Degree of proficiency in the English language.
10. Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment.
11. Minimum age requirements necessary to qualify for an occupational license or employment.

The opinionnaire was tested for content validity through a review of items by a panel of experts in the field of occupational education in Florida. These experts were not involved in positions which would have caused them to be included as members of the sample surveyed in this study.

Suggestions received from this panel were pooled and incorporated in the development of a revised copy of the opinionnaire which was used in this study. A copy of the revised opinionnaire with its integral transmittal letter is included in Appendix A.

Statistical Analysis

The statistical analyses used in this phase of the study included descriptive statistics, analysis of variance (ANOVA) on repeated measures, oneway multivariate analysis of variance (MANOVA), Kendall rank order correlational procedures, and a specially designed program which sorted and listed items by sub-groups as well as the total population on the basis of frequencies and means. All data collected on the equity opinionnaire were transferred to optical scan sheets. These sheets were then used to punch computer cards which permitted computer data file entry.

Means and standard deviations were obtained for all items on the admissions and waiting lists sections of the opinionnaire for the total population as well as individual sub-groups and professional roles. Descriptive statistics were derived through DSTAT2 and CROSTAB2, which are packages in the Statjob Series (Academic Computing Center).

The first and second null hypotheses (H_{01} and H_{02}), which stated that there were no significant differences between the responses of the total population surveyed to any of the factors (items) used for initial or program area admission and for admitted students who are on a waiting list, were tested by applying ANOVA on repeated measures to the data. This repeated measures procedure was available in BMDP2V through Biomedical Computer Programs (Dixon, 1975).

The third and fourth null hypotheses (H_{03} and H_{04}), which stated that there were no significant differences between the responses of the sub-groups of the population surveyed to any of the factors (items) used for institutional or program area admission and admission from a waiting list, were tested by applying MANOVA to the data. This oneway multivariate analysis of variance program and its' accompanying univariate F tests were obtained through Clyde (1969) Computing Service.

The degree of relationship between initial or program area admission (Part B) and admission from a waiting list (Part C) was determined by applying a Kendall rank order correlational procedure to the responses from the total population. In addition the relationship between the sub-groups was further analyzed by applying the identical procedure. This

procedure was obtained through a package on nonparametric statistics BMDP3S (Dixon, 1975). These relationships were determined by correlating the rank order of the means in each instance.

The final analysis sorted and listed the factors (items) by rank order for each sub-group as well as the total population on the basis of frequencies and means. The program which accomplished this was entitled KONG4. Dr. Dennis D. Murphy (1980), Research Associate, Florida International University, created this program especially to assist in the analysis of the data on this research project.

Chapter IV

FINDINGS

Introduction

The findings of this study are reported in a sequence reflecting the order in which they were undertaken. The report of phase one contains a representation of the admission standards, criteria and practices found to be in use by the three primary delivery systems for public occupational education in Florida. The report on this phase of the study also includes a description of the administrative practices in use for admitted students who have been placed on waiting lists to enter a specific program area of study.

The report on the second phase of this study includes the findings on the degree of equity associated with the admission process as measured by the public occupational education admission equity opinionnaire. The data obtained from the opinionnaire were used to test the hypotheses of this study. Each hypothesis is presented in the order it was listed in the statement of the problem. Discussion will be limited to the interpretation of the statistical information used to accept or reject each hypothesis. Conclusions, recommendations, and other discussion will be presented in the final chapter.

Phase I-Admission Standards

The admission standards found to be in use through the survey in this phase of the study were found to exist in two related modes. The first was admission standards found to be in use by institutions delivering public occupational education. The second was admission standards

in use by individual program areas within institutions surveyed. It should be noted that program area admission standards were in addition to the initial admission standards used by an institution.

Due to this situation, the findings of phase one will be reported in three separate sections. The first section will report findings of institutional admission standards. The second section will report findings of program area admission standards. The third will report findings of admission standards which have been consolidated to include those used by institutional delivery systems as well as those additional admission standards used by individual program areas.

All admission standards reported have been categorized by the researchers of this study to insure uniformity and grouping. Although such practice may slightly reduce complete precision as might be needed for the actual admission practice, it should not significantly affect the findings of this phase of the study. It should be noted that the findings reported have been provided by the respondents to the survey and do not include statutory admission standards as they might exist in state and Federal legislation per se.

Admission Standards: Institutional

The most common admission standard to be found in use was the standardized achievement test score. This accounted for slightly more than one-fourth (25.8%) of all the admission standards reported to be in use by institutional respondents.

Eight additional admission standards were also reported. In descending order of frequency these included previous grade point averages (22.6%), existing geographic boundaries and/or sending school boundaries (19.4%),

minimum age requirements necessary to qualify for an occupational license or employment (9.7%), individual interviews by counselors and/or instructors (6.5%), ability to meet minimal physical performance levels or standards necessary to an occupational license or employment (6.5%), standardized interest inventory test scores (3.2%), standardized aptitude test scores (3.2%), and admission preference given to low enrollment areas (3.2%).

None of the AVTC's or community colleges responding indicated the use of standardized aptitude tests or interest inventories in their admission process. These were, however, reported to be in use by CETA programs. Previous overall grade point average and the ability to meet minimal physical performance was not identified as an admission standard by any responding AVTC's but was identified by community colleges and CETA programs.

Individual interviews by counselors and/or instructors, minimal age requirements necessary to qualify for an occupational license or employment, or geographic boundaries were not identified as any of the admission standards in use by any CETA respondents.

Existing geographic boundaries and/or sending school boundaries would not be expected to be included as an admission standard for CETA programs. These are, however, common to most AVTC's and community colleges due to their supporting funding base.

A complete listing of the data used to develop the report for this section is included in Table 3.

TABLE 3
Frequency of Admission Standards in Use by Institutions
Responding to Phase I of Study

	AVTC N*	CETA N*	COMMUNITY COLLEGE N*	T O T A L N %
1. Standardized aptitude test scores.	-	1	-	1 3.2%
2. Previous overall grade point average.	-	3	4	7 22.6%
3. Individual interviews by counselors and/or instructors.	2	-	-	2 6.5%
4. Standardized achievement test scores.	1	4	3	8 25.8%
5. Existing geographic boundaries and/or sending school boundaries.	2	-	4	6 19.4%
6. Recommendations by others.	-	-	-	- -
7. Standardized interest inventory test scores.	-	1	-	1 3.2%
8. Admission preference given to low enrollment program areas.	1	-	-	1 3.2%
9. Degree of proficiency in the English language.	-	-	-	- -
10. Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment.	-	1	1	2 6.5%
11. Minimum age requirements necessary to qualify for an occupational license or employment.	1	-	2	3 9.6%
T O T A L S	7	10	14	31 100.0%

* The percentages were not computed separately for institutions due to the limited N of these individual categories in this phase of the study.

Admission Standards: Program Area

The two most common admission standards in use by program areas of the three institutional delivery systems responding to this phase of the study were the ability to meet minimal physical performance levels or standards necessary to an occupational license or employment (28.6%), and the use of individual interviews by counselors and/or instructors (26.8%). Previous overall grade point average was the most frequently identified admission standard by the AVTC's responding.

In decreasing order of frequency, the remaining admission standards in use by program areas of the three institutional delivery systems responding were minimal age requirements necessary to qualify for an occupational license or employment (10.7%), recommendations by others (8.9%), previous overall grade point averages (8.9%), scores from standardized aptitude tests (7.1%), standardized achievement test scores (5.4%), and the degree of proficiency in the English language (3.6%).

The degree of proficiency in the English language was reported in one program area of an AVTC and one program area of a community college responding. This program area admission standard was not reported by any CETA respondents.

A complete listing of the data used to develop the report for this section can be found in Table 4.

TABLE 4

Frequency of Admission Standards in Use by Program Areas Identified
by Institutions Responding to Phase I of Study*

	AVTC PROGRAM AREAS N**	CETA PROGRAM AREAS N**	COMMUNITY COLLEGE PROGRAM AREAS N**	T O T A L N %	
1. Standardized aptitude test scores.	1	-	3	4	7.1%
2. Previous overall grade point average.	5	-	-	5	8.9%
3. Individual interviews by counselors and/or instructors.	2	3	10	15	26.8%
4. Standardized achievement test scores.	-	1	2	3	5.4%
5. Existing geographic boundaries and/or sending school boundaries.	-	-	-	-	-
6. Recommendations by others.	3	-	2	5	8.9%
7. Standardized interest inventory test scores.	-	-	-	-	-
8. Admission preference given to low enrollment program areas.	-	-	-	-	-
9. Degree of proficiency in the English language.	1	-	1	2	3.6%
10. Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment.	4	3	9	16	28.6%
11. Minimum age requirements necessary to qualify for an occupational license or employment.	3	1	2	6	10.7%
T O T A L S	19	8	29	56	100.0%

* These admission standards are additional to those required for institutional admission. Although specific to a range of different program areas, these data have been pooled for use in this report.

** The percentages were not computed separately for institutions due to the limited N of these individual categories in this phase of the study.

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Admission Standards: Combined by Program Area and Institution

The two most common admission standards identified by respondents were the ability to meet minimal physical performance levels or standards necessary to an occupational license or employment (20.7%), and individual interviews by counselors and/or instructors (19.8%). Nine additional admission standards were identified in this combined section. These included in decreasing order of frequency previous overall grade point averages (13.8%), standardized achievement test scores (12.6%), minimal age requirements necessary to qualify for an occupational license or employment (10.3%), geographic and/or sending school boundaries (6.9%), standardized aptitude test scores (5.7%), recommendations by others (5.7%), degree of proficiency in the English language (2.3%), standardized interest inventory test scores (12.2%), and admission preference given to low enrollment areas (1.2%).

Standardized interest inventory test scores were utilized by one CETA program area respondent. It was not identified by any AVTC's or community colleges. Admission preference to low enrollment areas was identified by one AVTC. This practice was not listed by any CETA or community college respondents.

A complete listing of the data used to develop the report for this section can be found in table 5.

TABLE 5
Combined Frequency of Admission Standards in Use by Program
Areas and Institutions Responding to Phase I of Study

	AVTC N*	CETA N*	COMMUNITY COLLEGE N*	T O T A L N	%
1. Standardized aptitude test scores.	1	1	3	5	5.7%
2. Previous overall grade point average.	5	3	4	12	13.8%
3. Individual interviews by counselors and/or instructors.	4	3	10	17	19.6%
4. Standardized achievement test scores.	1	5	5	11	12.6%
5. Existing geographic boundaries and/or sending school boundaries.	2	-	4	6	6.9%
6. Recommendations by others.	3	-	2	5	5.7%
7. Standardized interest inventory test scores.	-	1	-	1	1.2%
8. Admission preference given to low enrollment program areas.	1	-	-	1	1.2%
9. Degree of proficiency in the English language.	1	-	1	2	2.3%
10. Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment.	4	4	10	18	20.7%
11. Minimum age requirements necessary to qualify for an occupational license or employment.	4	1	4	9	10.3%
T O T A L S	26	18	43	87	100.0%

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*The percentages were not computed separately for institutions due to the limited N of these individual categories in this phase of the study.

Phase II-Equity of Admission Standards

The major purpose of this research project was to determine the degree of equity of admission standards which are relevant to public occupational education programs in Florida. An in-depth understanding of the statistical procedures applied to the data in this research project can be facilitated by visualizing the three parts of the public occupational education admission equity opinionnaire (see Appendix A).

Part A, which is the first section of this opinionnaire, allowed data to be analyzed between the following population sub-groups:

Institution or Affiliation (A1)

1. Area Vocational Technical Education Centers (AVTC)
2. Comprehensive Employment and Training Act Programs (CETA)
3. Community Colleges (CC)
4. Advisory Councils (ADVISORY)
5. Advocacy Groups (ADVOCACY)

Title or Role Category (A2)

1. Administrators (ADMIN)
2. Counselors (COUNS)
3. Instructors (INSTR)
4. Advisory Councils (ADVISORY)
5. Advocacy Groups (ADVOCACY)

Parts B and C of the opinionnaire were identical in their content. Each included the same 19 factors or criterion which could be utilized to identify students who are to be admitted into public occupational education programs. Part B specifically addressed initial admission, while Part C was in reference to admitted students whose names have been placed on waiting lists.

Factors (Items) on the Public Occupational Education Admission Equity
Opinionnaire

The 19 factors or items listed below appeared in Parts B and C of the opinionnaire. Respondents to this survey instrument rated the degree of equity of these factors on a 5-point Likert-type scale. A rating of 1 represented the lowest degree of equity and a rating 5 represented the highest degree of equity.

1. Standardized aptitude test scores.
2. Previous overall grade point average.
3. Individual interviews by counselors and/or instructors.
4. Standardized achievement test scores.
5. Existing geographic boundaries and/or sending school boundaries.
6. Admission of an equal number of students from all sending schools.
7. A lottery selection system for all admissions.
8. Recommendations by others.
9. Admission of a proportional number of students based on the size of each sending school's student population.
10. The first students to apply will be the first students admitted.
11. Standardized interest inventory test scores.
12. Admission preference given to low enrollment program areas.
13. Degree of proficiency in the English language.
14. Standardized intelligence test scores.
15. Admission preference given to students who are women, minority group members, handicapped, or disadvantaged.
16. Standardized work sample or performance test scores.
17. Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment.

18. Minimum age requirements necessary to qualify for an occupational license or employment.

19. Standardized personality test scores.

These 19 factors will be referred to in the remainder of this report with a prefix of B or C, which represents the section of the original opinionnaire in which they were located. Items in Part B (initial admission or program area admission) are respectively represented by B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13, B14, B15, B16, B17, B18, and B19. In Part C (admitted students who are on waiting lists), the 19 factors will be respectively represented by C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, and C19.

Descriptive Statistics

Means and standard deviations were calculated for all 5 sub-groups under institution or affiliation and for administrators, counselors, and instructors under title or role category. It should be noted that these descriptive statistics were derived for the advisory councils and advocacy groups on the basis of the categorical responses in the institution or affiliation section of Part A of the research instrument. These data are included in Tables 6 and 7 for review.

A summary of the means for the total population and each sub-group is presented in Table 8. The items which were rated highest and lowest as evidenced by their calculated means are listed.

TABLE 6

Means (M) and Standard Deviations (SD)* for the Total Population
and Sub-Groups on Part B (Initial Admission or Program
Area Admission) of the Public Occupational
Education Admission Equity Opinionnaire

Factors (Items)	Total Population		Institution or Affiliation (A1)										Title or Role Category (A2)					
			AVTC		CETA		CC		ADVISORY		ADVOCACY		ADMIN		COUNS		INSTR	
	M	SD*	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
B 1	3.17	1.11	3.20	1.04	2.89	1.36	3.06	1.21	3.56	1.10	2.75	1.42	3.11	1.08	3.14	1.15	3.19	1.17
B 2	3.11	1.22	3.03	1.20	3.11	1.45	3.22	1.35	3.28	1.18	3.50	1.24	3.05	1.28	3.00	1.31	3.08	1.13
B 3	3.98	.96	4.03	.93	4.22	.67	3.67	1.08	3.67	1.08	4.25	1.05	3.91	.96	3.93	1.00	4.22	.89
B 4	3.07	1.06	3.05	1.03	3.00	1.12	3.00	1.14	3.39	1.29	2.92	1.00	3.03	1.01	2.93	1.22	3.06	1.09
B 5	2.11	1.25	2.12	1.24	1.67	1.12	2.39	1.46	2.06	1.21	2.05	1.26	2.06	1.27	2.36	1.36	2.22	1.25
B 6	2.11	1.27	2.15	1.31	2.67	1.58	1.94	1.06	1.78	.88	2.01	1.50	2.00	1.23	2.14	1.54	2.58	1.39
B 7	1.55	.97	1.52	.97	1.44	.73	1.78	1.11	1.33	.59	1.61	1.34	1.58	.92	2.29	1.70	1.36	.74
B 8	2.71	1.25	2.84	1.25	2.22	1.30	2.44	.98	2.56	1.29	2.33	1.43	2.62	1.17	2.43	.99	3.17	1.42
B 9	2.43	1.32	2.55	1.33	2.44	1.42	2.28	1.23	2.22	1.31	1.64	1.21	2.48	1.37	2.50	1.12	2.67	1.29
B10	3.03	1.44	3.27	1.42	2.89	1.62	2.72	1.32	2.39	1.33	2.25	1.42	3.05	1.41	3.29	1.54	3.44	1.48
B11	2.94	1.10	3.01	1.10	2.78	1.20	3.06	.94	2.72	1.02	2.58	1.38	2.96	1.05	3.00	1.41	3.14	1.11
B12	2.43	1.03	2.51	1.04	3.00	.71	2.11	1.08	2.17	.92	2.09	1.14	2.60	1.00	2.36	1.06	2.28	1.11
B13	2.96	1.12	2.89	1.14	2.78	.67	3.50	.79	2.94	1.16	2.83	1.27	2.86	1.06	2.93	.96	3.44	1.26
B14	2.59	1.10	2.70	1.08	1.67	.87	2.17	1.10	2.83	1.20	2.33	.89	2.45	1.10	2.40	.99	2.89	1.14
B15	2.46	1.31	2.30	1.21	3.11	1.69	2.72	1.23	2.50	1.50	3.00	1.59	2.53	1.31	2.71	1.03	2.14	1.19
B16	3.13	1.12	3.22	1.11	3.11	1.05	2.94	1.16	2.78	1.06	2.83	1.19	3.07	1.11	3.36	1.18	3.39	1.08
B17	3.79	1.18	3.88	1.16	3.22	1.39	3.94	1.16	3.89	.96	2.92	1.24	3.76	1.18	4.07	1.46	3.78	1.10
B18	3.54	1.24	3.65	1.21	3.00	1.22	3.94	1.35	3.33	.97	2.58	1.31	3.72	1.22	3.21	1.17	3.42	1.37
B19	2.26	1.09	2.40	1.09	1.56	1.01	1.78	.88	2.28	1.18	2.08	1.08	2.14	1.04	2.36	.98	2.72	1.18

*Unbiased Estimates of Population SD

TABLE 7

Means (M) and Standard Deviations (SD)* for the Total Population
and Sub-Groups on Part C (Admitted Students Who Are on
Waiting Lists) of the Public Occupational
Education Admission Equity Opinionnaire

Factors (Items)	Total Population		Institution or Affiliation (A1)										Title or Role Category (A2)					
			AVTC		CETA		CC		ADVISORY		ADVOCACY		ADMIN		COUNS		INSTR	
	M	SD*	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
C 1	3.31	1.14	3.45	1.08	2.89	1.27	3.33	1.19	3.53	1.18	2.92	1.44	3.31	1.08	3.14	1.35	3.33	1.17
C 2	3.21	1.24	3.2	1.23	2.67	1.32	3.61	1.09	3.29	1.26	3.25	1.42	3.16	1.28	3.21	1.42	3.25	1.10
C 3	3.98	.99	3.98	.99	3.78	1.09	4.00	.84	3.94	1.09	4.17	1.03	3.94	.96	4.00	1.03	4.03	1.05
C 4	3.11	1.08	3.10	1.03	3.00	1.22	3.22	1.26	3.35	1.22	2.83	1.03	3.11	1.05	3.00	1.24	3.03	1.13
C 5	2.15	1.20	2.10	1.17	1.67	.87	2.56	1.46	2.05	.90	2.45	1.57	2.13	1.29	2.14	1.17	2.22	1.15
C 6	2.02	1.21	2.02	1.24	2.11	1.27	1.72	1.07	1.88	.86	2.54	1.57	1.87	1.16	2.00	1.47	2.47	1.36
C 7	1.57	.98	1.57	1.00	1.33	.71	1.94	1.14	1.41	.62	1.42	1.16	1.72	1.06	2.00	1.57	1.31	.58
C 8	2.78	1.29	2.82	1.25	2.78	1.39	2.83	1.20	2.47	1.33	2.58	1.73	2.74	1.23	2.57	1.49	3.08	1.30
C 9	2.39	1.32	2.47	1.31	2.22	1.39	2.17	1.38	2.25	1.35	2.25	1.48	2.39	1.35	2.14	1.10	2.58	1.36
C10	3.17	1.49	3.34	1.45	3.22	1.79	3.17	1.54	2.59	1.33	2.33	1.56	3.27	1.44	3.21	1.53	3.42	1.56
C11	2.92	1.17	3.00	1.16	2.22	1.09	3.00	1.14	2.88	1.11	2.67	1.50	2.87	1.11	2.86	1.51	3.19	1.19
C12	2.48	1.18	2.56	1.18	2.23	1.00	2.56	1.46	2.18	1.07	2.17	1.19	2.60	1.17	2.71	1.38	2.36	1.26
C13	2.95	1.19	2.89	1.22	2.67	.50	3.56	.86	2.65	1.17	3.00	1.35	2.86	1.13	3.00	1.11	3.36	1.33
C14	2.53	1.12	2.63	1.12	1.44	.73	2.17	1.04	2.71	1.21	2.50	.90	2.39	1.08	2.36	1.01	2.83	1.28
C15	2.57	1.39	2.45	1.32	3.22	1.79	2.83	1.29	2.29	1.45	3.17	1.64	2.69	1.41	2.64	1.28	2.31	1.26
C16	3.24	1.21	3.35	1.18	2.78	1.20	2.89	1.32	3.31	1.14	2.75	1.29	3.10	1.18	3.21	1.40	3.58	1.20
C17	3.70	1.25	3.77	1.21	3.22	1.39	3.83	1.38	3.76	1.15	3.08	1.38	3.70	1.23	3.93	1.56	3.64	1.25
C18	3.54	1.24	3.64	1.23	3.11	1.17	4.06	1.39	3.35	.86	2.50	1.17	3.72	1.25	3.43	1.25	3.36	1.35
C19	2.29	1.14	2.46	1.15	1.56	1.01	1.72	.89	2.29	1.16	2.08	1.08	2.15	1.08	2.14	.03	2.81	1.26

*Unbiased Estimates of Population SD

TABLE 8
Range of Means (M) for the Total Population and Sub-Groups
on the Factors (Items) in Parts B and C of the
Public Occupational Education Admission
Equity Opinionnaire

Part B - Initial Admission or Program Area Admission

	Total Population	Institution or Affiliation (A1)					Title or Role Category (A2)		
		AVTC	CETA	CC	ADVISORY	ADVOCACY	ADMIN	COUNS	INSTR
Low Item	1.55 (B7)	1.52 (B7)	1.44 (B7)	1.78 (B7,B19)	1.33 (B7)	1.64 (B9)	1.58 (B7)	2.29 (B7)	1.36 (B7)
High Item	3.98 (B3)	4.03 (B3)	4.22 (B3)	3.94 (B17,B18)	3.89 (B17)	4.25 (B3)	3.91 (B3)	4.07 (B17)	4.22 (B3)

Part C - Admitted Students Who Are on Waiting Lists

	Total Population	Institution or Affiliation					Title or Role Category		
		AVTC	CETA	CC	ADVISORY	ADVOCACY	ADMIN	COUNS	INSTR
Low Item	1.57 (C7)	1.57 (C7)	1.33 (C7)	1.72 (C6)	1.41 (C7)	1.42 (C7)	1.72 (C7)	2.00 (C6,C7)	1.31 (C7)
High Item	3.98 (C3)	3.98 (C3)	3.78 (C3)	4.06 (C18)	3.94 (C3)	4.17 (C3)	3.94 (C3)	4.00 (C3)	4.03 (C3)

Analysis of Variance (ANOVA) on Repeated Measures Applied to the Responses of the Total Population for Null Hypotheses 1 and 2

Null hypotheses 1 and 2 stated:

H0₁ There are no significant differences between the responses of the total population surveyed to any of the factors used for institutional or program area admission as measured by the public occupational education admission equity opinionnaire.

H0₂ There are no significant differences between the responses of the total population surveyed to any of the factors used for students who have already been admitted to an institution or program area and who have been placed on a waiting list as measured by the public occupational education admission equity opinionnaire.

These null hypotheses, which respectively represent Parts B and C of the public occupational education admission equity opinionnaire, were tested by applying ANOVA to the 19 items as repeated measures.

Each of these null hypotheses had to be tested twice since the sub-groups in Part A were categorically divided into two sections. These two sections, institution or affiliation (A1) and title or role category (A2), were each represented by five sub-groups (see p. 78).

The statistical analyses applied to the 19 factors (items) in Parts B and C of the research instrument indicated that there were significant differences ($p \leq .05$) between the items for the total population. However, as presented in Tables 9 and 10, interaction was present between the sub-groups in A1 and the items on both Part B and Part C. Consequently, the main effects, which clearly indicated significant differences between the means on the 19 factors on Parts B and C, had to be further qualified by

TABLE 9

Analysis of Variance (ANOVA) on Repeated Measures Applied to the Responses of the Total Population on the 19 Factors (Items) in Part B (Initial or Program Area Admission) on the Public Occupational Education Admission Equity Opinionnaire

Institution or Affiliation (A1)					
Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u> ratio	Significance
Among Groups	4	24.11	6.03	1.50	.21
Error	163	656.17	4.03		
Among Items	18	485.06	26.95	22.40	.00
Interaction (Item*Sub-Group)	72	134.55	1.87	1.55	.00
Error	2934	3530.15	1.20		
Title or Role Category (A2)					
Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u> ratio	Significance
Among Groups	4	26.82	6.70	1.65	.16
Error	162	658.84	4.07		
Among Items	18	475.41	26.41	21.88	.00
Interaction (Item*Sub-Group)	72	110.30	1.53	1.27	.06
Error	2916	3520.07	1.21		

TABLE 10

Analysis of Variance (ANOVA) on Repeated Measures Applied to the Responses of the Total Population on the 19 Factors (Items) in Part C (Admitted Students Who Are on Waiting Lists) on the Public Occupational Education Admission Equity Opinionnaire

Institution or Affiliation (A1)					
Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F ratio</u>	Significance
Among Groups	4	29.21	7.30	1.37	.24
Error	163	866.29	5.31		
Among Items	18	508.98	28.28	22.99	.00
Interaction (Item*Sub-Group)	72	120.56	1.67	1.36	.02
Error	2934	3608.06	1.23		
Title or Role Category (A2)					
Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F ratio</u>	Significance
Among Groups	4	16.55	4.14	.76	.55
Error	162	879.18	5.43		
Among Items	18	500.44	27.80	22.44	.00
Interaction (Item*Sub-Groups)	72	98.29	1.36	1.10	.26
Error	2916	3613.13	1.24		

noting sub-group differences.

Null hypotheses 1 and 2 were rejected. However, due to the identified interaction, the main effects are not necessarily equally true for all sub-groups (Kerlinger, 1973).

Descriptive statistics for each of the 19 items in Parts B and C, which resulted from the responses of the total population and the sub-groups, can be inspected in Tables 6, 7, and 8. In addition, a comparison of these items was made by sorting and listing their relative positions within the total population on the basis of their rank ordered means and frequencies. This data is included in Tables 12 and 13 (see Appendix B).

Oneway Multivariate Analysis of Variance (MANOVA) Applied to the Responses of the Sub-Groups for Null Hypotheses 3 and 4.

Null hypotheses 3 and 4 stated:

H0₃ There are no significant differences between the responses of the sub-groups of the population surveyed to any of the factors used for institutional or program area admission as measured by the public occupational education admission equity opinionnaire.

H0₄ There are no significant differences between the responses of the sub-groups of the population surveyed to any of the factors used for students who have been admitted to an institution or program area and who have been placed on a waiting list as measured by the public occupational education admission equity opinionnaire.

These null hypotheses, which respectively represent Parts B and C of the public occupational education admission equity opinionnaire, were tested by applying a oneway multivariate analysis of variance (MANOVA) procedure to the data.

Each null hypothesis had to be tested twice due to the fact that the sub-groups in Part A of the opinionnaire were categorically divided into two sections. Responses were analyzed for the five sub-groups representing institution or affiliation (A1) and the five sub-groups representing title or role category (A2) (see p. 78).

MANOVA (Clyde, 1969) was applied to the data acquired in Parts B and C of the research instrument across the five sub-groups in sections A1 and A2. This procedure indicated that there were significant differences ($p \leq .05$) between the sub-groups in A1 on Parts B and C. However, the differences were not significant between the sub-groups in A2 on Parts B or C. Therefore, null hypotheses 3 and 4 were accepted. Results of this procedure are presented in Table 11.

The program which generated these results also applied a univariate F test to the data. Subsequently, responses of the five sub-groups on each of the 19 factors (items) were analyzed. This procedure identified items on which the sub-groups differed significantly ($p \leq .05$). Liberty was taken to present all of the F values and levels of significance resulting from the univariate F tests on the 19 factors in Parts B and C in Table 11.

Comparison of Factors (Items) in Parts B and C for the Total Population

The 19 items in Parts B and C were sorted and listed by rank order for the total population on the basis of frequencies and calculated means. This procedure was conducted through a program entitled KONG4 (Murphy, 1980).

Frequencies were determined for ratings of (4 and 5) and (1 and 2) on the 5-point Likert-type scale. These sets of ratings were chosen since they respectively reflect a relatively high degree or low degree of equity.

TABLE 11

Multivariate and Univariate Analysis of Variance Applied to the Responses of the Five Sub-Groups in A1 (Institution or Affiliation) and A2 (Title or Role Category) on the 19 Factors (Items) in Part B (Initial or Program Area Admission) and Part C (Admitted Students Who Are on Waiting Lists) on the Public Occupational Education Admission Equity Opinionnaire

Oneway Multivariate Analysis of Variance (MANOVA)									

F= F value

p= Level of Significance

dfn= Degrees of Freedom in Numerator

dfd= Degrees of Freedom in Denominator

Table 12 (see Appendix B) includes a rank ordered listing of the items in Part B based on the calculated means of the responses for the total population. Note that the item descriptions have been abbreviated. In addition, Table 12 includes item means and frequency of ratings in the (4 and 5) and (1 and 2) categories for Part B. Identical types of information are presented in Table 13 for Part C (see Appendix B).

Furthermore, the degree of relationship between responses for the total population on Part B (initial or program area admission) and Part C (admission from a waiting list) was determined by applying a Kendall rank order correlation procedure to the data. The relationship was determined by correlating the rank order of the means for the factors in Part B with those of Part C. This procedure resulted in a Kendall rank order correlation coefficient of .9267. This high correlation indicates that respondents' ratings of the items in Part B were very similar to their ratings of the items in Part C.

Comparison of Factors (Items) in Parts B and C for the Five Sub-Groups in A1 (Institution or Affiliation) and the Administrator, Counselor, and Instructor Sub-Groups in A2 (Title or Role Category)

The 19 items in Parts B and C were sorted and listed by rank order for each sub-group on the basis of frequencies and means. A program entitled KONG4 (Murphy, 1980) was utilized to conduct this procedure.

The number of responses (frequency) in the (4 and 5) and (1 and 2) categories on the 5-point Likert-type scale were determined. These categories of ratings were selected since they reflected a relatively high degree or low degree of equity.

Tables 14 through 21 (see Appendix B) include a rank ordered listing of the items in Parts B and C based on the calculated means of the responses for each sub-group. It should be noted that the item descriptions and table titles have been abbreviated. In addition these tables include the item means and frequency of ratings in the high (4 and 5) and low (1 and 2) degree of equity categories.

Relationship Between the Five Sub-Groups in A1 (Institution or Affiliation) and the Administrator, Counselor, and Instructor Sub-Groups in A2 (Title or Role Category) on Parts B and C

The degree of relationship between five sub-groups in A1 and three sub-groups in A2 were analyzed separately on Part B (initial or program area admission) and Part C (admission from a waiting list) of the opinionnaire. The relationships were determined by applying a Kendall rank order correlational procedure to the responses of the sub-groups. Kendall rank order correlation coefficients were derived by correlating the rank order of the means for the sub-groups in A1 and A2. These coefficients are presented in Tables 22 and 23 (see Appendix B).

Summary of the Findings Presented in Tables 12 through 21

Tables 12 through 21 (see Appendix B) included the rank ordered listings of the 19 factors (items) on Part B (initial or program area admission) and Part C (admission from a waiting list) of the public occupational education admission equity opinionnaire based on their calculated means. These tables also listed the means for each item, as well as the frequency of ratings in the (4 and 5) and (1 and 2) categories on the 5-point Likert-type scale. These sets of ratings were selected since they reflected a relatively high or low degree of equity.

It should be noted that Tables 12 and 13 listed the findings for the total population on Parts B and C, respectively. Tables 14 through 18 included the findings for the five sub-groups (AVTC, CETA, CC, ADVISORY, and ADVOCACY) in section A1 (institution or affiliation) on Parts B and C. And Tables 19 through 21 contained the findings for the ADMIN, COUNS, and INSTR sub-groups in section A2 (title or role category) on Parts B and C.

A summary process was conducted in order to determine the degree of equity of admission standards which are relevant to public occupational education programs in Florida. Critical findings presented in Tables 12 through 21 are summarized in Tables 24 through 27.

Tables 24 and 26 respectively identify the factors (items) which possess the highest degree of equity on Parts B and C. Those items with the lowest degree of equity in Parts B and C are presented in Tables 25 and 27, respectively.

Factors identified in Tables 24 through 27 represent those which had the highest or lowest degree of equity. Only items which were initially rated high (4 and 5) were considered to possess a relatively high degree of equity, while only those items rated low (1 and 2) were classified as having a low degree of equity. The findings presented in Tables 12 through 21 include the actual number of respondents who selected the high (4 and 5) or low (1 and 2) ratings. These numbers (referred to as frequencies in the tables) were used to identify the factors with a high or low degree of equity.

In most cases the four items which were rated 4 and 5 most often (represents the upper 20%) were selected as the items with the greatest degree of equity. The four items which were rated 1 and 2 most often

TABLE 24

Summary of Findings From Tables 12 through 21: Factors (Items)
 With the Highest Degree of Equity on Part B (Initial
 Admission or Program Area Admission) of the Public
 Occupational Education Admission
 Equity Opinionnaire

Factors (Items)	Total Population	AVTC	CETA	CC	ADVISORY	ADVOCACY	ADMIN	COUNS	INSTR	TOTAL
B 1					X					1
B 2			X	X		X				3
* B 3	X	X	X	X	X	X	X	X	X	9*
B 4					X					1
B 5										
B 6										
B 7										
B 8										
B 9							X	X	X	5*
* B10	X	X				X				1
B11										
B12									X	1
B13										
B14						X				1
B15								X	X	2
B16							X	X	X	8*
* B17	X	X	X	X	X		X			5*
* B18	X	X	X	X						5*
B19										

* Highest Degree of Equity (Represents Upper 20%)

TABLE 25

Summary of Findings From Tables 12 through 21: Factors (Items)
With the Lowest Degree of Equity on Part B (Initial
Admission or Program Area Admission) of the Public
Occupational Education Admission
Equity Opinionnaire

Factors (Items)	Total Population	AVTC	CETA	CC	ADVISORY	ADVOCACY	ADMIN	COUNS	INSTR	TOTAL
B 1										
B 2										
B 3										
B 4										
* B 5	X	X	X		X	X	X	X	X	8*
* B 6	X	X		X	X	X	X	X		7*
* B 7	X	X	X	X	X	X	X	X	X	9*
B 8					X			X		2
* B 9				X	X	X		X		4*
B 10						X				1
B 11										
* B 12				X		X		X	X	4*
B 13										
B 14			X							1
B 15		X			X				X	3
B 16										
B 17										
B 18										
* B 19	X		X	X			X			4*

* Lowest Degree of Equity (Three Tied for 4th Position which Normally Represents Lower 20%)

TABLE 26

Summary of Findings From Tables 12 through 21: Factors (Items)
 With the Highest Degree of Equity on Part C (Admitted
 Students Who Are on Waiting Lists) Of the Public
 Occupational Education Admission
 Equity Opinionnaire

Factors (Items)	Total Population	AVTC	CETA	CC	ADVISORY	ADVOCACY	ADMIN	COUNS	INSTR	TOTAL
* C 1			X	X	X	X				4*
C 2				X		X		X		3
* C 3	X	X	X	X	X	X	X	X	X	9*
C 4					X					1
C 5										
C 6										
C 7										
C 8						X				1
C 9										
* C10	X	X	X				X	X	X	6*
C11						X				1
C12										
C13									X	1
C14										
C15			X			X				2
C16								X		1
* C17	X	X	X	X	X	X	X	X	X	9*
* C18	X	X		X			X			4*
C19										

95

* Highest Degree of Equity (Two Tied for 4th Position which Normally Represents Upper 20%)

TABLE 27

Summary of Findings From Tables 12 through 21: Factors (Items)
 With the Lowest Degree of Equity on Part C (Admitted
 Students Who are on Waiting Lists) Of the Public
 Occupational Education Admission
 Equity Opinionnaire

Factors (Items)	Total Population	AVTC	CETA	CC	ADVISORY	ADVOCACY	ADMIN	COUNS	INSTR	TOTAL
C 1										
C 2										
C 3										
C 4										
*C 5	X	X	X		X	X	X	X	X	8 *
*C 6	X	X		X	X		X	X		6 *
*C 7	X	X	X	X	X	X	X	X	X	9 *
C 8										
*C 9	X	X		X		X		X		5 *
C10						X				1
C11										
C12					X	X			X	3
C13										
C14			X			X				2
C15									X	1
C16										
C17										
C18										
C19			X	X		X	X			4

* Lowest Degree of Equity (Represents Lower 20%)

(represents the lowest 20%) were chosen as the factors with the least degree of equity. However, in situations where there was a tie for the fourth position all of the tied items were included. This listing was developed from the findings of the total population as well as the eight sub-groups.

The following 19 factors (items), which appeared in Parts B and C of the opinionnaire, are listed for reference. Due to space limitations these are only identified by their code numbers in Tables 24 through 27.

1. Standardized aptitude test scores.
2. Previous overall grade point average.
3. Individual interviews by counselors and/or instructors.
4. Standardized achievement test scores.
5. Existing geographic boundaries and/or sending school boundaries.
6. Admission of an equal number of students from all sending schools.
7. A lottery selection system for all admissions.
8. Recommendations by others.
9. Admission of a proportional number of students based on the size of each sending school's student population.
10. The first students to apply will be the first students admitted.
11. Standardized interest inventory test scores.
12. Admission preference given to low enrollment program areas.
13. Degree of proficiency in the English language.
14. Standardized intelligence test scores.
15. Admission preference given to students who are women, minority group members, handicapped, or disadvantaged.
16. Standardized work sample or performance test scores.
17. Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment.

18. Minimum age requirements necessary to qualify for an occupational license or employment.

19. Standardized personality test scores.

Results (Tables 24 and 26) of this aspect of the study have identified four factors (items) which appear to have the highest degree of equity on both Parts B and C of the public occupational education admission equity opinionnaire. Items 3, 10, 17, and 18 were identified on both Parts B and C. In addition, item 1 was identified as having a high degree of equity on Part C since it was tied with item 18 for the fourth position.

Summary findings listed in Tables 25 and 27 indicate that four common factors (items) were identified as having the lowest degree of equity on both Parts B and C of the opinionnaire. Factors identified on both Parts B and C were 5, 6, 7, and 9. Items 12 and 19 were identified as having a low degree of equity on Part B since they were tied with item 9 for the fourth position.

Summary

The complete statistical analysis of the 19 factors (items) on Part B (initial admission or program area admission) and Part C (admitted students who are on waiting lists) of the public occupational education admission equity opinionnaire was conducted through three primary stages. Null hypotheses 1 and 2 were tested by applying ANOVA on repeated measures to the data (Dixon, 1975). A oneway multivariate analysis of variance procedure (MANOVA) was used to test null hypotheses 3 and 4 (Clyde, 1969). The final stage involved a statistical (rank ordering) procedure of determining which factors (items) had the highest degree of equity and which items had the lowest degree of equity. This procedure was documented on pages 88 through 97.

of this chapter. Findings which were derived from this process have made it possible to semantically interpret the meaning of the clustered items with a high or low degree of equity.

Results were analyzed, tables prepared, and judgments were reached relative to each hypothesis as well as the degree of equity associated with the 19 factors on Parts B and C. Findings supported the rejection of null hypotheses 1 and 2. However, since there was interaction between the sub-groups in A1 (institution or affiliation) and the items in Parts B and C, the main effects are not necessarily equally true for all sub-groups (Kerlinger, 1973). Results of the statistical test (MANOVA) applied to null hypotheses 3 and 4 indicated that they had to be accepted since the differences between the sub-groups in A2 (title or role category) were not significant.

In the final analysis, four common factors (items) were identified as having the highest degree of equity on both Parts B and C of the opinionnaire and four common factors were identified as having the lowest degree of equity on both parts. The results indicated that items 3, 10, 17, and 18 were the most equitable and items 5, 6, 7, and 9 were the least equitable.

Chapter V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Primary concerns of this chapter are presentation of the summary, conclusions, recommendations, and implications arrived at through analyses of data collected during this investigation. Sections to be reviewed and discussed in this chapter are: restatement of the purpose of the study, review of null hypotheses, content of the public occupational education admission and equity opinionnaire, review of the sample, reiteration of methods and procedures, summary of findings and conclusions, discussion, and recommendations.

Purpose of the Study

The central purpose of this investigation was to review admission standards, criteria, and practices used in the delivery of public occupational education programs in Florida. Institutional delivery systems which were investigated included: (1) Area Vocational Technical Education Centers (AVTC's), (2) Community Colleges, and (3) Programs administered by prime sponsors of the Comprehensive Employment and Training Act (CETA). It was anticipated that this study might increase the understanding of the accessibility of public occupational education available to Florida's citizens.

Potentially, specific knowledge to be gained through this investigation included: (1) a determination of admission standards and criteria currently in use, (2) the identification of the policies and practices which may be used to admit students on "waiting lists" to enter programs

in which enrollments have reached maximum capacity, (3) an assessment of the problem associated with the development and implementation of admission policies and practices, and (4) the opinions of a diversified sample of persons associated with occupational education regarding the equity of factors used to admit students to public occupational education programs in Florida.

Null Hypotheses

To ascertain possible answers to the questions raised in the purpose of the study and to attain the goals of this investigation the following null hypotheses were tested:

- H0₁ There are no significant differences between the responses of the total population surveyed to any of the factors used for institutional or program area admission as measured by the public occupational education admission equity opinionnaire.
- H0₂ There are no significant differences between the responses of the total population surveyed to any of the factors used for students who have already been admitted to an institution or program area and who have been placed on a waiting list as measured by the public occupational education admission equity opinionnaire.
- H0₃ There are no significant differences between the responses of the sub-groups of the population surveyed to any of the factors used for institutional or program area admission as measured by the public occupational education admission equity opinionnaire.

H0₄ There are no significant differences between the responses of the sub-groups of the population surveyed to any of the factors used for students who have been admitted to an institution or program area and who have been placed on a waiting list as measured by the public occupational education admission equity opinionnaire.

The Public Occupational Education

Admission Equity Opinionnaire

Items used in this opinionnaire resulted from data collected in phase one (see Chapter 4) of this investigation as well as through selected findings identified in a comprehensive review of related literature. These factors were listed in this identical order on Part B (initial or program area admission) and Part C (admitted students who are on waiting lists) of the opinionnaire. The eleven items which are astericked (*) were identified through the findings of phase one of this study.

A 5-point Likert-type rating scale was utilized with each of the factors to determine their degree of equity. A rating of 5 represented the highest degree of equity and a rating of 1 represented the lowest degree of equity.

- *1. Standardized aptitude test scores.
- *2. Previous overall grade point average.
- *3. Individual interviews by counselors and/or instructors.
- *4. Standardized achievement test scores.
- *5. Existing geographic boundaries and/or sending school boundaries.
- 6. Admission of an equal number of students from all sending schools.

7. A lottery selection system for all admissions.
 - *8. Recommendations by others.
 9. Admission of a proportional number of students based on the size of each sending school's student population.
 10. The first students to apply will be the first students admitted.
 - *11. Standardized interest inventory test scores.
 - *12. Admission preference given to low enrollment program areas.
 - *13. Degree of proficiency in the English Language.
 14. Standardized intelligence test scores.
 15. Admission preference given to students who are women, minority group members, handicapped, or disadvantaged.
 16. Standardized work sample or performance test scores.
 - *17. Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment.
 - *18. Minimum age requirements necessary to qualify for an occupational license or employment.
 19. Standardized personality test scores.
- *These eleven admission standards were identified from admission practices which were actually being utilized in the state of Florida.

Selection of the Sample

This investigation was conducted in two phases. The randomly selected sample surveyed in phase one included two AVTC's, two community colleges, and four programs administered by prime sponsors of the Comprehensive Employment and Training Act (CETA) in each of Florida's five regional areas.

The sample surveyed in phase two of the investigation initially included 440 randomly selected individuals who were associated with occupational

education or advocacy groups in Florida. Attrition due to nondeliverable (address unknown or incorrect address) opinionnaires resulted in an adjusted sample size of 377 with a usable return of 173 or 45.89%. Persons surveyed essentially represented: (1) AVTC administrators, counselors and instructors; (2) community college administrators, counselors and instructors of non-degree occupational education programs; (3) CETA program administrators and instructors; (4) advisory council members for occupational education programs; and, (5) advocacy group members. Advocacy groups selected for this study included organizations concerned with blacks, hispanics, women, handicapped, and disadvantaged individuals.

This population was identified throughout this study by the following sub-group classifications, codes and acronyms:

Institution or Affiliation (A1)

1. Area Vocational Technical Education Centers (AVTC)
2. Comprehensive employment and Training Act Programs (CETA)
3. Community Colleges (CC)
4. Advisory Councils (ADVISORY)
5. Advocacy Groups (ADVOCACY)

Title or Role Category (A2)

1. Administrators (ADMIN)
2. Counselors (COUNS)
3. Instructors (INSTR)
4. Advisory (ADVISORY)
5. Advocacy (ADVOCACY)

Procedures and Methods

Procedures and methods observed in conducting this investigation were:

Phase I

- A. Identification of institutions in the population.
- B. Establishment of a sampling procedure.
- C. Development of a research instrument.
- D. Collection of data.
- E. Analysis of data.

Phase II

- A. Development of a research instrument.
 1. Review of data collected in Phase I of the study.
 2. Review of related literature.
 3. Validation of instrument by a panel of experts.
- B. Determination of the composition of the population.
- C. Identification of mailing lists for the population.
- D. Establishment of sampling procedure.
- E. Collection of data.
- F. Analysis of data.
- G. Completion of the research report.

Findings and Conclusions

Findings of this study were derived by analyzing data gathered through a statewide survey using the public occupational education admission equity opinionnaire. Analysis of variance (ANOVA) on repeated measures (Dixon, 1975) was used to test null hypotheses 1 and 2 and a oneway multivariate analysis of variance (MANOVA) procedure (Clyde, 1969) was utilized to test null hypotheses 3 and 4.

The final procedure of determining the factors (items) with the highest and lowest degree of equity involved a rank ordering process. The preliminary computer program which facilitated this process was entitled KONG4 (Murphy, 1980). This program was specifically designed to sort and list items on Parts B and C of the opinionnaire by rank order for each sub-group as well as the total population on the basis of frequencies and calculated means. The details of this procedure are described on pages 88 through 97 in Chapter 4. Conclusions reached from the analysis of data and presentation of findings related to the null hypotheses and the factors with the greatest and least degree of equity are presented in the next four sections.

Null Hypotheses 1 and 2

Analysis of data computed on Part B (initial institutional or program area admission) and Part C (admitted students whose names have been placed on waiting lists) of the opinionnaire revealed significant differences between the means for the 19 factors (items) on both parts based on the responses of the total population. However, interaction between sub-groups in A1 (institution or affiliation) and the items was identified on both Part B and Part C. Therefore, the main effects or significant differences are not necessarily equally true for all sub-groups. The first and second null hypotheses were not accepted.

Based on the data obtained on Parts B and C of this opinionnaire, significantly different degrees of equity were associated with the 19 items on both Parts B and C. Responses of the sample surveyed indicated that the total population believed some of the admission standards were significantly more equitable than others.

Null Hypotheses 3 and 4

Data analyses on Part B (initial institutional or program area admission) and Part C (admitted students whose names have been placed on waiting lists) of the opinionnaire did not identify significant sub-group differences by title or role category (A2). Consequently, the third and fourth null hypotheses were accepted.

However, it is imperative to note that the sub-groups in A1 (institution or affiliation) differed significantly on the equity ratings they provided for the 19 factors in Parts B and C of the research instrument. Overall it appears that the AVTC's, CC's, CETA programs, advisory councils and advocacy groups do not tend to agree on the degree of equity associated with the admission standards listed. The institution or affiliation sub-groups' (A1) degree of equity ratings were considerably different on items 10, 14, 17, 18, and 19.

As has already been indicated, the administrators', counselors', instructors', advisory councils', and advocacy groups' degree of equity ratings were not significantly different. However, these sub-groups by title or role category (A2) expressed substantial differences in their degree of equity ratings on items 6, 7, 10, 13, 18, and 19.

Factors with the Highest Degree of Equity

Four factors (items) were most frequently rated as having a high degree of equity by the total population as well as the eight sub-groups. Items 3, 10, 17, and 18 were identified on Part B (initial admission or program area admission) and Part C (admitted students who are on waiting lists) of the opinionnaire. In addition, item 1 was identified as having a high degree of equity on Part C since it was tied with item 18 for the fourth

position.

Admission standards or criteria that were determined to be the most equitable on Parts B and C included:

3. Individual interviews by counselors and/or instructors.
10. The first students to apply will be the first students admitted.
17. Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment.
18. Minimum age requirements necessary to qualify for an occupational license or employment.

 Rated High on Part C only:

1. Standardized aptitude test scores.

Factors with the Lowest Degree of Equity

Four factors (items) were most frequently rated as having a low degree of equity by the total population as well as the eight sub-groups. Items 5, 6, 7, and 9 were identified on Part B (initial admission or program area admission) and Part C (admitted students who are on waiting lists) of the opinionnaire, items 12 and 19 were also identified as having a low degree of equity on Part B, since they were tied with item 9 for the fourth position.

Admission standards or criteria that were determined to be the least equitable on Parts B and C included:

5. Existing geographic boundaries and/or sending school boundaries.
6. Admission of an equal number of students from all sending schools.
7. A lottery selection system for all admissions.

9. Admission of a proportional number of students based on the size of each sending school's student population.

 Rated low on Part B only:

12. Admission preference given to low enrollment program areas.
 19. Standardized personality test scores.

Discussion

Several useful and interesting concepts have been illustrated through this investigation. The findings in addition to identifying admission standards with high and low equity ratings also serve to point out differences of opinion in this area.

Recent Federal regulations are impacting on this topic and may in all probability influence future policies and practices used to admit students to public occupational education programs. Discussion will be presented which synthesize these regulations with the findings of this study.

The researchers feel that the results of this investigation will add to the body of knowledge surrounding admission practices and serve as a medium to further integrate this topic with the broad-based conceptual area of individual civil rights. Data analyzed in this study have revealed empirical and semantic understanding of the student admission process as well as the degree of equity associated with admission practices.

Relationship Between Factors Used for Initial or Program Area Admission and Admission from a Waiting List

The total population surveyed indicated that there is only a slight difference in the degree of equity associated with the 19 factors (items)

on Parts B and C of the opinionnaire. These respondents essentially gave high degree of equity ratings to the same items on Part B as Part C. This was also true of the items which were rated as having a low degree of equity. Overall, the degree of relationship between the factors on Part B and the identical factors on Part C was represented by a Kendall rank order correlation coefficient of .9267. Therefore, it seemed that the respondents did not feel that a different set of admission standards should be used to admit students who had been placed on waiting lists for oversubscribed programs.

Utilization of Admission Standards which Have a High or Low Degree of Equity Associated with Them

Results of phase one of this investigation identified eleven admission standards that were actually being utilized by institutions to determine which students would be allowed to enter their public occupational education programs. Each of these eleven criteria were included on the public occupational education admission equity opinionnaire (see page 77).

After phase two of the study was completed, it became evident that one of the items which was identified as having a high degree of equity was not included in the eleven standards that were actually being used to select students. Item 10 (The first students to apply will be the first students admitted.) was not identified by any of the programs surveyed in phase one as a current admission practice. It is interesting that item 10 was a distant third to items 3 (Individual interviews by counselors and/or instructors.) and 17 (Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment.) on both Parts B and C of the opinionnaire. Community colleges, advisory councils,

and advocacy groups did not rate item 10 as having a high degree of equity on either Part B or Part C and CETA programs did not give this item a high rating on Part C (admitted students who are on waiting lists).

The conceptual foundation underlying the first come first served criteria is based upon the principle of intent and serves as a courtesy in most social systems. For example, the concept of seniority in the work environment and the timeliness of interest are basic to the legal structure of this country as well as an everyday consideration afforded to all individuals. This same concept did not, however, receive the highest equity rating.

One of the four factors which had a low degree of equity as a result of the analyses on phase two was identified as currently being in practice on phase one. This item was number 5 (Existing geographic boundaries.). Community colleges was the only sub-group which did not rate item 5 as having a low degree of equity on either Part B or Part C of the opinionnaire. This finding correlated well with the reported use of existing geographic boundaries and/or sending school boundaries by community colleges in phase one of Chapter 4 in this study. Community colleges classified as AVTC's have developed their admission standards and practices around pre-existing geographic or sending school boundaries.

Item 12 (Admission preference given to low enrollment program areas.) was determined to have a low degree of equity on Part B of the opinionnaire; although it was also identified as being currently in practice on phase one of the investigation. The appearance of this item in the low degree of equity category is not surprising since students rightfully should not be placed in low enrollment programs simply because they need program

participants. This practice was actually reported by one AVTC during the first phase of this study.

As evidenced by the ratings of instructors, counselors, community colleges, and advocacy groups this practice is low in its degree of equity and obviously is a procedure that should not occur merely to generate FTE's (full-time equivalents) for funding purposes.

Influences to the Selection Process

Analyses of Tables 24 and 26 clearly indicate that individual interviews by counselors and/or instructors (item 3) as well as students' abilities to meet minimal physical performance levels or standards necessary to an occupational license or employment (item 17) are the factors with the highest degree of equity. Consensus of all sub-groups indicates that instructors and/or counselors should be involved in making admission decisions based on the results of individual interviews.

Further review of the data indicates that different reasons may exist for this preference by the various sub-groups within the total population. CETA programs and advocacy groups also expressed an interest in item 15 (admission preference). This association may be the result of a desire to show special consideration for students who are women, minority group members, handicapped, or disadvantaged during the interview process. Note on Tables 24 and 26 that these sub-groups were the only ones who associated a relatively high degree of equity with item 15.

Instructors and counselors may prefer the individual interview as a follow-up activity to standardized test results. These two sub-groups expressed an interest in using scores on standardized work samples and

performance tests. Their ratings on item 16 indicated a relatively high degree of equity.

A potential hazard may exist in the use of interviews as a follow-up to results on standardized tests. Individuals who do not meet minimal levels of professional expertise in this area as established by the American Psychological Association may not make valid decisions based on this information. These guidelines for the administration and interpretation of standardized tests have been established to ensure that individuals' human rights and established clinical procedures are not violated.

The instructor and community college sub-groups gave item 13 (Degree of proficiency in the English language.) a fairly high degree of equity rating. It is possible to surmise that instructors, who are not bi-lingual, would have difficulty in conducting an interview with prospective students who are not fluent in the English language.

Analyses of Tables 25 and 27 clearly indicate that a lottery system for all admissions (item 7) is the least desirable admission standard. It was unanimous that this item should be classified in the grouping of items with the lowest degree of equity.

When this low level of consideration for the lottery system is coupled with high ratings for individual interviews it becomes apparent that program leaders are not willing to allow pure chance to be the sole influence on determining which students might be admitted to their programs. Also impacting on this concept is the importance placed on program funding patterns, accountability, and program evaluation. As these issues are applied to programmatic areas, the importance of graduating successful students becomes extremely critical in maintaining a quality image.

In the final analysis, program evaluation is primarily concerned with positive benefit outcomes or successful placements on the job. Evaluation systems are not sensitive enough to detect individuals' positive developmental changes. Nor do funding sources seem to be sincerely interested in measuring individuals' developmental growth patterns. These concepts may influence the decision-making process that instructors, counselors, and administrators experience when selecting students.

Differences in Sub-groups' Ratings on Factors (Items) with the Highest and Lowest Degree of Equity

Procedures followed in this investigation enabled the identification of four factors (3, 10, 17, and 18) which seem to have the highest degree of equity. However, considerable disagreement existed between the sub-groups' ratings on items 10 and 18. These differences in agreement were identified by the results of Rau's univariate F test (Table 11). Calculated means for each sub-group on the 19 factors can be inspected in Tables 6 and 7.

Advisory councils and advocacy groups did not feel as strongly as other sub-groups that students who apply first should be the first admitted (item 10). Additionally, advocacy groups did not appear to hold minimum age requirements necessary for an occupational license or employment (item 18) as high as other sub-groups, while the community colleges placed a great deal of emphasis on this standard.

Factors 5, 6, 7, and 9 were determined to have the least degree of equity. Items 12 and 19 were in this low degree of equity category on Part B of the opinionnaire. It should be noted that the sub-groups in A2 (title or role category) did not express homogeneous feelings about factors 6, 7,

and 19. CETA programs and instructors were more inclined to admit an equal number of students from all sending schools (item 6) than other sub-groups. Counselors and community colleges seemed to be most receptive to the idea of using a lottery system (item 7) to admit qualified students to programs; however, it should be noted that the lottery system was unanimously identified as the least equitable solution. Standardized personality test scores (item 19) were generally regarded as being unequitable. Although it is interesting to note that individuals representing CETA programs ranked this factor lowest and instructors ranked it highest.

Relating Admission Standards Currently in Practice and Factors with a High or Low Degree of Equity to the Office of Civil Rights Guidelines

On March 21, 1979, the Office of Civil Rights (OCR) published a set of guidelines to eliminate discrimination and denial of services on the basis of race, color, national origin, sex, and handicap in vocational education programs. Ultimately these were intended to redirect current vocational guidance practices which had evolved since the early 1900's (Kapes & Greenwood, 1979). The regulations were developed to provide vocational education personnel with additional guidance and support, since vocational education administrators had specifically been cited for engaging in unlawful discriminatory practices (Office of Civil Rights, 1979).

These guidelines were presented in their entirety in the review of literature of this report (see page 38). In summary, the regulations clearly stated that institutions offering public occupational education programs may not use geographic boundaries which unlawfully exclude students on the basis of race, color, or national origin. Nor may they utilize a system which limits admission to a fixed number of students from each sending

school or institution in a service area, if such a system disproportionately excludes students on the basis of race, sex, national origin, or handicap. Additionally, recipients of Federal funds may not judge candidates for admission to public occupational education programs on the basis of criteria that have the effect of disproportionately excluding persons of a particular race, color, national origin, sex, or handicap (Office of Civil Rights, 1979).

The OCR guidelines further indicated that the following admissions criteria should only be used if they do not disproportionately exclude students on the basis of race, color, national origin, sex, or handicap (unless such criteria have been validated as essential to participation in a given program and that alternative equally valid criteria that do not have such disproportionate adverse effect are unavailable):

1. Academic performance
2. Record of disciplinary infractions
3. Counselors' approval
4. Teachers' recommendations
5. Interest inventories
6. High school diploma
7. Standardized tests
8. Prerequisite course(s)

Office of Civil Rights (1979) regulations also indicated that public occupational education programs may not restrict admission to national origin minority students with limited English language skills, who they believe cannot participate in and benefit from vocational instruction to the same extent as a student whose primary language is English. Nor may handicapped students be denied access to vocational programs because of

architectural or equipment barriers, or because of the need for related services or auxiliary aids.

Now that OCR guidelines have been delineated it is appropriate to compare them with the results of phases one and two of this investigation. Only discrepancies resulting from this comparison shall be discussed.

Admission standards currently in practice. Composite findings of phase one of this study indicated that the following admission standards are currently being practiced by some of the sampled AVTC's, CETA programs, and community colleges:

1. Standardized aptitude test scores.
2. Previous overall grade point average.
3. Individual interviews by counselors and/or instructors.
4. Standardized achievement test scores.
5. Existing geographic boundaries and/or sending school boundaries.
6. Recommendations by others.
7. Standardized interest inventory test scores.
8. Admission preference given to low enrollment program areas.
9. Degree of proficiency in the English language.
10. Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment.
11. Minimum age requirements necessary to qualify for an occupational license or employment.

Of these 11 admission standards, numbers 2, 3, 4, 10, and 11 were reportedly most frequently used (see page 77). Out of these five standards, previous overall grade point average (2), individual interviews by counselors and/or instructors (3), and standardized achievement test

scores (4) appear to have the greatest potential conflict with the Office of Civil Rights (1979) regulations. Therefore, these three admission standards may require further review by institutions delivering public occupational education programs.

The guidelines clearly indicated that academic performance and standardized tests should only be used if they do not disproportionately exclude students on the basis of race, color, national origin, sex, or handicap. Consequently, institutions using such practices will have to document the impact of the standards on students who have been admitted compared to students who were not admitted.

The regulations also specifically identified records of disciplinary infractions, counselors' approval, and teachers' recommendations as admission criteria that should only be used if they do not disproportionately exclude special interest groups. Utilization of individual interviews by counselors and/or instructors may require review in terms of these recent OCR guidelines. The actual criteria included in the interview and the ultimate decision-making process would have to be critically examined. OCR regulations essentially indicated that nebulous admissions criteria should not be used if they disproportionately exclude special interest groups. Public occupational education personnel and OCR officials should jointly be concerned about the possibility of any subjective decisions that might result from the individual interview process.

The Office of Civil Rights did not specifically address the use of minimal performance levels or standards (10) and minimum age requirements (11) as they relate to admission practices. Minimal physical performance standards could possibly disproportionately exclude women or handicapped

individuals from an occupational program. However, if these standards were derived from a valid job analysis and if no other equally valid criteria that did not have such a disproportionate adverse effect were available, it would be proper to continue using the standards. Standards of minimal physical performance appear to be excellent admission standards if they truly represent the occupation for which the programs enrollees are being trained and if precise measurements are actually being conducted for comparison. Minimum age and physical requirements have statutory and regulatory foundations. Any adjustments to these regulations would require legislative or agency action at the state or Federal levels.

Respondents in phase one of this study, who primarily represented AVTC's and community colleges, also stated that they were using standardized aptitude test scores (1), existing geographic boundaries and/or sending school boundaries (5), and recommendations by others (6) as admission standards. OCR regulations in conjunction with standardized tests and recommendations about others have already been discussed; however, the utilization of geographic or sending school boundaries has not been dealt with.

The OCR guidelines stated that institutions may not establish, approve or maintain geographic boundaries for a vocational education service area that unlawfully excludes students on the basis of race, color, or national origin. Nor may they limit eligibility to a fixed number of students from each sending school included in the center's service area if such a system disproportionately excludes special interest groups. If such practices are in existence the responsibility to review and modify them, if necessary, lies with local institutions and appropriate state agencies.

Factors with a high degree of equity. Items 3, 10, 17, and 18 on the public occupational education admission equity opinionnaire were rated as having the highest degree of equity. Respondents to this survey believed that individual interviews by counselors and/or instructors (3), the first students to apply will be the first students admitted (10), ability to meet minimal physical performance levels or standards necessary to an occupational license or employment (17), and minimum age requirements necessary to qualify for an occupational license or employment (18) were the most equitable admission standards.

As has already been discussed, factor 10 was the only one of these four items which was not identified in phase one of this investigation. Subsequently, comments on the relationship between items 3, 17, and 18 and the Office of Civil Rights (OCR) guidelines would be almost identical to those presented in the last sub-section of this report. Regarding item 10 (The first students to apply will be the first students admitted.), it appears that the OCR regulations endorse this admission standard as a highly objective criterion which could only exclude a disproportionate number of a special interest group on a chance basis. This method may therefore be the fairest way possible of handling initial admissions as well as admitted students on waiting lists for oversubscribed programs.

Ratings placed factor 10 in a distant third position to items 3 and 17. It may be speculated that the respondents to this survey intended to allow students into programs on a first come first served basis only after they had the initial opportunity to accept or reject them based on the application of the criteria in factors 3 and 17. The process and criteria used in the individual interview are obviously the critical elements with which the

Office of Civil Rights would be concerned.

Item 1 (Standardized aptitude test scores.) was tied for the fourth position with item 18 on Part C of the opinionnaire for the high degree of equity category. Its relationship to the OCR regulations has already been dealt with in the OCR position on using standardized tests as an admission standard.

Factors with a low degree of equity. Items 5, 6, 7, and 9 were identified on both Parts B and C of the opinionnaire as having a low degree of equity. In addition, factors 12 and 19 were tied with item 9 on Part B for the fourth position in this low degree of equity category. Respondents to this survey indicated that existing geographic boundaries and/or sending school boundaries (5), admission of an equal number of students from all sending schools (6), a lottery selection system for all admissions (7), admission of a proportional number of students based on the size of each sending school's student population (9), admission preference given to low enrollment program areas (12) (Part B only), and standardized personality test scores (19) (Part B only) were the least equitable admission standards.

Beliefs expressed by the respondents on items 5, 6, and 9 seem to indicate that the sample surveyed desires to comply with the sections in the Office of Civil Rights (OCR) guidelines on geographic and sending school boundaries. However, these feelings have not apparently affected the admission standards that are currently in practice since several AVTC's and community colleges reported using existing geographic boundaries and/or sending school boundaries in phase one of this investigation.

The low degree of equity associated with a lottery selection system for all admissions (7), is difficult to understand. It seems that the OCR

would view this admission standard as an objective criterion, which could not systematically exclude a disproportionate number of any special interest group. A well-documented lottery selection system would seem to be an extremely fair method of handling initial program entry and entry from a waiting list for oversubscribed programs, if the applicants had been previously screened using objective criteria prior to a published cut-off date. It could be speculated that the respondents to this survey were not confident in this approach due to its limited application to school admission practices, its association with controversial military draft induction procedures, and its total by chance implications.

Respondents ratings placed items 12 and 19 in the low degree of equity category on Part B of the opinionnaire. The Office of Civil Rights guidelines clearly indicated that program entrance could be based on standardized tests if they did not exclude a disproportionate number of any group on the basis of race, sex, national origin, or handicap. Considering the psychometric qualities of most personality tests it is no wonder that the use of standardized personality test scores (19) was associated with a low degree equity.

Item 12 (Admission preference given to low enrollment program areas.) would be in violation of the OCR regulations and would be an unfair and unethical method of determining program admission. It would violate the rights of any person to be placed in a program simply because that program needed a certain number of participants to generate a specific number of full-time equivalents (FTE's).

Making Admission Standards and Policies Open to the Public

Findings and conclusions derived through this investigation tend to support the need for a critical self-examination of admission standards and practices in use by public occupational education programs. Until further leadership is provided at the state or Federal level, community colleges and AVTC's must be totally responsible for their program eligibility and placement practices in order to insure that they do not discriminate against any individuals seeking program entry.

The set of questions presented in the review of the literature of this report warrant being repeated. These questions should be given careful consideration in conjunction with the self-examination process.

1. Are the criteria nondiscriminating measures of success in the program? Or do the criteria "cream off" the so-called "best" students to the exclusion of those who could learn the skills for a particular trade just as adequately as the "best" in the class (McClure, 1980)?
2. Could other experiences be substituted for a particular requirement?
3. Are all students required to meet the same eligibility requirements?
4. What training can be provided to prepare students to meet entrance requirements (Albright, 1979; Davis & Ward, 1978)?
5. Have admissions criteria been validated as essential to participation in a program before they were used if they disproportionately exclude protected group persons from vocational education programs (Office of Civil Rights, 1979)?

Compliance with OCR guidelines could be enhanced by adhering to due process, by carefully enunciating admissions criteria, and by placing

requirements for eligibility on public view (Kraft, 1977). Admissions processes can readily be reformed to conform with a higher standard of due process by utilizing:

1. Well-articulated and publicly disseminated standards of admission;
2. Criteria validated for the stated educational objectives;
3. A system of challenges to the criteria;
4. A statement of reasons for rejection (when requested by the rejectee);
5. A right to see and challenge extra-record information; and
6. A right to informal hearing when facts are disputed (Gellhorn & Hornby, 1974).

Section O (PUBLIC NOTIFICATION) of the Office of Civil Rights (1979) regulations clearly stated that all recipients of Federal funds must advise students, parents, employees, and the general public that all vocational opportunities will be offered without regard to race, color, national origin, sex, or handicap. The OCR has recommended announcing this policy of non-discrimination through local newspapers, recipient publications, and/or other media that reach the general public, program beneficiaries, minorities (including national origin minorities with limited English language skills), women, and handicapped persons. The guidelines continue by stating that this announcement should include a brief summary of program offerings and admission criteria, as well as the name, address and telephone number of the person designated to coordinate Title IX and section 504 compliance activity. If a recipient's service area contains a community of national origin minority persons with limited English language skills, public notification materials must be disseminated to that community in its language. In addition, the announcement must state that recipients will

take steps to assure that the lack of English language skills will not be a barrier to admission and participation in vocational education programs.

The Office of Civil Rights has charged recipients of Federal funds with openly announcing a brief summary of their program offerings and admission criteria. A strong case for openness was presented by Kraft (1977) when he stated:

Openness in public administration is valuable and helpful for a number of general reasons. It educates the citizenry and protects their right to know what is being done in their name. It promotes a clearer definition of standards in decision-making, as well as consistency in the application of those standards. It can protect against abuses stemming from absolute and uncontrolled discretion. Also, openness has the function of draining off suspicion, resentment, distrust, and the like. (p. 60)

Importance is being placed on openness as a medium to motivate public occupational education programs to formulate specific admission standards. In the future, all program areas at community colleges and AVTC's may be required to place their admissions criteria in writing. The only programs which may not need to be held accountable in this respect are those that are able to admit all applicants at all times. In addition, oversubscribed programs will likely need a formal written policy stating how admissions from waiting lists will be handled.

These concerns seem especially relevant due to the fact that individual interviews by counselors and/or instructors and students' abilities to meet minimal physical performance levels or standards necessary to an occupational license or employment were the most frequently used admission standards identified and they had the highest degree of equity ratings. If individual interviews are to be central to the decision-making process, then it seems necessary to openly announce the actual criteria which are being assessed

through the interview. Programs may have to develop a highly structured weighted interview format. However, critical elements of this process would have to objectively assess potential students' abilities to meet the minimal requirements of the vocational training program. If program admittance is determined by students' abilities to meet minimal physical performance levels or standards, then it seems necessary to quantifiably identify the required physical performance. The actual performances in terms of bending, lifting, kneeling, crawling, running, etc. have to be correlated with required weights and distances. This type of documentation would make it possible to precisely measure individuals' physical capacities directly related to performing the job.

Recommendations

Findings and conclusions resulting from the analysis of data gathered on the public occupational education admission equity opinionnaire have lead to the following recommendations:

1. That surveys of oversubscribed programs be conducted in order to assess whether or not current admission standards and/or policies exist and to determine whether or not the admission practices are in compliance with the Office of Civil Rights Final Guidelines.
2. That public documents be developed and disseminated statewide which expand upon the critical elements of the Office of Civil Rights (1979) Final Guidelines.
3. That training programs for vocational counselors, administrators, and instructors be developed and offered as necessary in the five regions of Florida which aid in the implementation of the OCR Final Guidelines as they apply to local admission practices.

4. That a student selection model be developed for each vocational education programmatic area offered by Florida's community colleges and AVTC's. Plans for program areas that are oversubscribed could be given top priority. These models could be utilized on a state-wide basis to develop individualized local programmatic student selection plans and/or policies.
5. That objective interview guidelines be developed for use by vocational instructors, counselors, and administrators in institutional and specific programmatic area admission practices. These guidelines must be validated in terms of their ability to predict which potential students will or will not be successful on the job.
6. That minimal physical performance levels or standards for entry into a specific occupational training program be established. These standards must also be validated as a predictive measure of satisfactory physical ability for employment upon program completion.

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APPENDIX A
CORRESPONDENCE AND INSTRUMENTATION



FLORIDA INTERNATIONAL UNIVERSITY

TAMiami CAMPUS • MIAMI, FLORIDA 33199 • (305) 552-2711

SCHOOL OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION

November 14, 1979

The Florida State Advisory Council on Vocational and Technical Education is sponsoring our research team in an effort to determine further understanding of the admission standards and practices used in Florida's public occupational education programs.

To aid us in our research effort, certain preliminary information is needed. Please take a few minutes from your schedule to provide us the following information as it applies to institutions within the geographic boundaries of your regional office:

1. A listing of all area vocational-technical education centers.
2. A listing of all community college/campus centers with vocational-technical or other occupational education programs.

Thank you for your cooperation in this matter. Do not hesitate to contact either of us if we can be of any assistance as you prepare this information. Our telephone number is (305) 552-2711.

Sincerely yours,

Chester P. Wichowski
Project Co-Director/Assistant Professor
Division of Vocational Education

Dennis G. Tesolowski
Project Co-Director/Assistant Professor
Division of Vocational Education

CPW/DGT:emg



FLORIDA INTERNATIONAL UNIVERSITY

MIAMI CAMPUS • MIAMI, FLORIDA 33199 • (305) 552-2711

SCHOOL OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION

November 29, 1979

The Florida State Advisory Council on Vocational and Technical Education is sponsoring our research team in an effort to determine further understanding of the admission standards and practices used in Florida's public occupational education programs.

To aid us in our research effort, certain preliminary information is needed. Please take a few minutes from your schedule to provide us the following information as it applies to occupational education programs which are funded through the 1979-80 fiscal year by your prime sponsorship:

1. The Program Title
2. The Name of the Program Director
3. The Address and Telephone Number of Program's Administrative Office.

This information will serve as a data base to establish a stratified random sample for our survey efforts in the near future.

Thank you for your cooperation in this matter. Do not hesitate to contact either of us if we can be of any assistance as you prepare this information. Our telephone number is (305) 552-2711.

Sincerely yours,

Chester P. Wichowski
Chester P. Wichowski
Project Co-Director/Assistant Professor
Division of Vocational Education

Dennis G. Tesolowski
Dennis G. Tesolowski
Project Co-Director/Assistant Professor
Division of Vocational Education

CPW/DGT:mm



FLORIDA INTERNATIONAL UNIVERSITY

TAMiami CAMPUS • MIAMI, FLORIDA 33199 • (305) 552-2711

SCHOOL OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION

November 29, 1979

The Florida State Advisory Council on Vocational and Technical Education is sponsoring our research team in an effort to obtain a greater understanding of admission standards and practices used in Florida's public occupational education programs. Your institution has been randomly identified as a member of our sample for this study.

We need specific preliminary information from each of the randomly identified institutions. Submission of this data will enhance this sponsored research effort.

Please take a few minutes from your schedule to provide us with the information requested on the enclosed questionnaire. Also, please identify an administrator on your staff who would serve as a contact person and liaison for future segments of this research project. List the name, title, address and telephone number of the contact person chosen in the space provided on the questionnaire.

Please return this information by January 16, 1980. A pre-addressed mailing label has been included for your convenience in the transmittal of this information. Thank you for your cooperation in this joint endeavor.

Do not hesitate to contact either of us if we can be of any assistance as you prepare this information. Our telephone number is (305)552-2711.

Sincerely yours,

Chester P. Wichowski
Project Co-Director/Assistant Professor
Division of Vocational EducationDennis G. Tesolowski
Project Co-Director/Assistant Professor
Division of Vocational Education

CPW/DGT:emg

Enclosures

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QUESTIONNAIRE

FLORIDA PUBLIC OCCUPATIONAL EDUCATION
ADMISSION STANDARDS AND PRACTICES STUDY

INSTRUCTIONS: Please provide the information listed below:

1. A contact person to represent your institution in future segments of this study:

NAME _____
Last First Title
Institution _____
Telephone Number _____

2. Submit generic Admission Standards and Procedural Guidelines used by your institution.*
3. Submit additional Admission Standards and Procedural Guidelines which may be used by specific occupational program areas at your institution.*
4. Identify any occupational programs at your institution which may have a "waiting list" of students desiring admission. Please list program area(s) and the number of students on any waiting lists for the 1979-80 school year.

<u>Program Area(s)</u>	<u>Number of Students on "Waiting List"</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

5. Submit Institutional or Program Area Procedural Guidelines which are followed in order to process students on a "waiting list".*

*Attach to this Questionnaire.

Please complete and return this requested information with appropriate materials by December 15, 1979 to:

Florida Public Occupational Education
Admission Standards Practices Study
The Division of Vocational Education
Florida International University
Tamiami Campus
Miami, FL 33199

A Research Effort Sponsored
by the
Florida State Advisory Council on Vocational and
Technical Education 59



FLORIDA INTERNATIONAL UNIVERSITY

TAMiami CAMPUS • MIAMI, FLORIDA 33199 • (305) 552-2711

SCHOOL OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION

January 24, 1980

The Florida State Advisory Council on Vocational and Technical Education is sponsoring our research team in an effort to obtain a greater understanding of admission standards and practices used in Florida's public occupational education programs. Training programs offered under Titles IIB and/or III of the Comprehensive Employment and Training Act fit into this category. Your institution/program has been randomly identified as a member of our sample for this study.

We need specific preliminary information from each of the randomly identified institutions and/or programs. Submission of this data will enhance this sponsored research effort.

Please take a few minutes from your schedule to provide us with the information requested on the enclosed questionnaire. Also, please identify an administrator on your staff who would serve as a contact person and liaison for further segments of this research project. List the name, title, address and telephone number of the contact person chosen in the space provided on the questionnaire.

Please return this information by February 11, 1980. A pre-addressed mailing label has been included for your convenience in the transmittal of this information. Thank you for your cooperation in this joint endeavor.

Do not hesitate to contact either of us if we can be of any assistance as you prepare this information. Our telephone number is (305) 552-2711.

Sincerely yours,

Chester P. Wichowski
Project Co-Director/Assistant Professor
Division of Vocational Education

Dennis G. Tesolowski
Project Co-Director/Assistant Professor
Division of Vocational Education

CPW/DGT:emg

Enclosures

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QUESTIONNAIRE

FLORIDA PUBLIC OCCUPATIONAL EDUCATION
ADMISSION STANDARDS AND PRACTICES STUDY

INSTRUCTIONS: Please provide the information listed below:

1. A contact person to represent your institution in future segments of this study:

NAME _____
Last First Title
Institution _____
Telephone Number _____

2. Submit generic Admission Standards and Procedural Guidelines used by your institution.*
3. Submit additional Admission Standards and Procedural Guidelines which may be used by specific occupational program areas at your institution.*
4. Identify any occupational programs at your institution which may have a "waiting list" of students desiring admission. Please list program area(s) and the number of students on any waiting lists for the 1979-80 school year.

<u>Program Area(s)</u>	<u>Number of Students on "Waiting List"</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

5. Submit Institutional or Program Area Procedural Guidelines which are followed in order to process students on a "waiting list".*

*Attach to this Questionnaire.

Please complete and return this requested information with appropriate materials by December 15, 1979 to:

Florida Public Occupational Education
Admission Standards Practices Study
The Division of Vocational Education
Florida International University
Tamiami Campus
Miami, FL 33199

A Research Effort Sponsored
by the
Florida State Advisory Council on Vocational and
Technical Education



FLORIDA INTERNATIONAL UNIVERSITY

MIAMI CAMPUS • MIAMI, FLORIDA 33199 • (305) 552-2711

SCHOOL OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION

February 8, 1980

Dear

As discussed during our telephone conversation today, please complete the enclosed questionnaire in terms of: (1) the generic admission standards for CETA students and, (2) the procedures used for processing students who may be on "waiting lists" to enter CETA occupational training programs offered by:

- A. Mid-County Medical Center Training Schools.
- B. Other training programs in operation under the administration of your office.

A pre-addressed return mailing label has been included for your convenience.

Thank you for your cooperation in this matter.

Sincerely yours,

Chester Wichowski
Project Co-Director

CW:emg

Enclosure



FLORIDA INTERNATIONAL UNIVERSITY

MIAMI CAMPUS • MIAMI, FLORIDA 33199 • (305) 952-2711

SCHOOL OF EDUCATION
DIVISION OF INTERNATIONAL EDUCATION

February 13, 1980

Dear

Enclosed is the questionnaire we discussed during our telephone conversation today. Please complete the information requested as it relates to C.E.T.A. students and return to me at your earliest possible convenience.

Thank you for your cooperation in this matter.

Sincerely, yours,

A handwritten signature in cursive script, appearing to read 'Chester Wichowski'.

Chester Wichowski
Project Co-Director

Closing

Enclosure



FLORIDA INTERNATIONAL UNIVERSITY

MIAMI CAMPUS • MIAMI, FLORIDA 33199 • (305) 552-2711

SCHOOL OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION

February 22, 1980

Dear

Enclosed is the questionnaire we discussed during our telephone conversation today. Please complete the information requested as it relates to: (1) the generic admission standards for C.E.T.A. students administered by your office, (2) the procedures used for processing students to C.E.T.A. programs contracted to Santa Fe Community College by your office, and (3) the procedures used for processing students who may be on waiting lists to enter any C.E.T.A. programs contracted to Santa Fe Community College by your office.

Thank you for your cooperation in this matter. Do not hesitate to contact me if I can be of any further assistance to you in terms of these questions.

Sincerely yours,

Chester Wichowski
Project Co-Director

Enclosure



FLORIDA INTERNATIONAL UNIVERSITY

TAMiami CAMPUS • MIAMI, FLORIDA 33199 • (305) 552-2711

SCHOOL OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION

March 24, 1980

Dear Colleague:

Would you please take approximately fifteen minutes from your busy schedule to assist us in our research effort sponsored by the Florida State Advisory Council on Vocational and Technical Education? The integral three-part opinionnaire has been developed to aid us in another phase of our study of admission standards, criteria, and practices commonly applied to persons seeking entry to public occupational education programs in Florida.

Part A of the opinionnaire involves the collection of basic demographic data. Part B is designed to aid in the assessment of your opinion on the equity of a series of factors which are commonly applied to the admission practice. Part C is designed to aid in the assessment of your opinion on the equity of this same series of factors. In this part, however, these factors are applied to individuals who have been admitted to an occupational education program and have been placed on a waiting list to enter since the program of their choice has already reached maximum capacity.

The data supplied by you will be used in strict confidence. Neither your name nor the name of your institution or affiliation will be used in the report of this study. All data will be pooled in order to report findings.

The findings of this study will be used to: (1) identify the opinions of interested key persons related to factors associated with admission practices and, (2) the identification of standards which may be used to develop future admission practices in occupational education programs.

Please complete the opinionnaire to the best of your ability. A return postage paid envelope is enclosed for your convenience. Your participation is greatly appreciated. Return your completed opinionnaire by April 18, 1980.

Sincerely yours,

Chester P. Wichowski
Project Co-Director

Dennis G. Tesolowski
Project Co-Director

CPW:DGT/mm

Enclosure

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A Research Effort Sponsored
by the
Florida State Advisory Council on Vocational and
Technical Education

PUBLIC OCCUPATIONAL EDUCATION ADMISSION
EQUITY OPINIONNAIRE

PART A: DEMOGRAPHIC DATA: Answer each question by placing a check in the appropriate space.

1. Institution or affiliation: ☐ AVTC, ☐ CETA, ☐ Community College, ☐ Advisory Council, ☐ Advocacy Group, ☐ Other (if other, please specify): _____
2. Title or role category: ☐ Administrator, ☐ Counselor, ☐ Instructor, ☐ Advisory Council or Advocacy Group Member, ☐ Other (if other, please specify): _____

PART B: FACTORS USED FOR INITIAL ADMISSION OR PROGRAM AREA ADMISSION:

Rate each one of the Factors listed according to the degree of equity it represents to you. Use the numerical rating scale provided. Place the numerical rating which you feel best represents your opinion in the space provided to the right of each item. Rate all items.

1	2	3	4	5
Low				High
Degree of Equity				Degree of Equity

1. Standardized aptitude test scores. _____
2. Previous overall grade point average. _____
3. Individual interviews by counselors and/or instructors. _____
4. Standardized achievement test scores. _____
5. Existing geographic boundaries and/or sending school boundaries. _____
6. Admission of an equal number of students from all sending schools. _____
7. A lottery selection system for all admissions. _____
8. Recommendations by others. _____
9. Admission of a proportional number of students based on the size of each sending school's student population. _____
10. The first students to apply will be the first students admitted. _____
11. Standardized interest inventory test scores. _____
12. Admission preference given to low enrollment program areas. _____
13. Degree of proficiency in the English language. _____
14. Standardized intelligence test scores. _____
15. Admission preference given to students who are women, minority group members, handicapped, or disadvantaged. _____
16. Standardized work sample or performance test scores. _____
17. Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment. _____
18. Minimum age requirements necessary to qualify for an occupational license or employment. _____
19. Standardized personality test scores. _____
20. Other (if other, please specify): _____

PUBLIC OCCUPATIONAL EDUCATION ADMISSION

EQUITY OPINIONNAIRE

PART C: FACTORS USED FOR ADMITTED STUDENTS WHO ARE ON WAITING LISTS:

Rate each of the factors listed according to the degree of equity it represents to you. Use the numerical rating scale provided. Place the numerical rating which you feel best represents your opinion in the space provided to the right of each item. Rate all items.

1	2	3	4	5
Low				High
Degree of Equity				Degree of Equity

1. Standardized aptitude test scores. _____
2. Previous overall grade point average. _____
3. Individual interviews by counselors and/or instructors. _____
4. Standardized achievement test scores. _____
5. Existing geographic boundaries and/or sending school boundaries. _____
6. Admission of an equal number of students from all sending schools. _____
7. A lottery selection system for all admissions. _____
8. Recommendations by others. _____
9. Admission of a proportional number of students based on the size of each sending school's student population. _____
10. The first students to apply will be the first students admitted. _____
11. Standardized interest inventory test scores. _____
12. Admission preference given to low enrollment program areas. _____
13. Degree of proficiency in the English language. _____
14. Standardized intelligence test scores. _____
15. Admission preference given to students who are women, minority group members, handicapped, or disadvantaged. _____
16. Standardized work sample or performance test scores. _____
17. Ability to meet minimal physical performance levels or standards necessary to an occupational license or employment. _____
18. Minimum age requirements necessary to qualify for an occupational license or employment. _____
19. Standardized personality test scores. _____
20. Other (if other, please specify): _____

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APPENDIX B
TABLES 12 THROUGH 23

TABLE 12

Means, Frequency of Ratings in the 4 and 5 (High Degree of Equity) and 1 and 2 (Low Degree of Equity) Categories on the 5-Point Likert-Type Scale, and a mean Rank Ordered Listing Of the Factors (Items) in Part B (Initial Admission or Program Area Admission) of The Public Occupational Education Admission Equity Opinionnaire For The Total Population

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=173)	
				(4 & 5)	(1 & 2)
B 3	1	Individual Interviews By Counselors and/or Instructors	3.96	128	12
B17	2	Ability to Meet Minimal Physical Performance Levels	3.76	113	24
B18	3	Minimum Age Requirements Necessary To Qualify For An	3.50	94	35
B 1	4	Standardized Aptitude Test Scores	3.17	62	43
B16	5	Standardized Work Sample Or Performance Test Scores	3.13	69	42
B 2	6	Previous Overall Grade Point Average	3.09	69	55
B 4	7	Standardized Achievement Test Scores	3.08	50	44
B10	8	The First Students To Apply Will Be The First Students Admitted	3.05	76	58
B11	9	Standardized Interest Inventory Test Scores	2.98	61	55
B13	9	Degree Of Proficiency In English Language	2.98	50	50
B 8	10	Recommendations By Others	2.71	54	75
B14	11	Standardized Intelligence Test Scores	2.59	32	69
B 9	12	Admission Of A Proportional Number Of Students	2.47	40	88
B12	13	Admission Preference Given to Low Enrollment Program Areas	2.46	25	79
B15	14	Admission Preference Given To Students Who Are Women	2.45	31	85
B19	15	Standardized Personality Test Scores	2.30	18	94
B 6	16	Admission Of An Equal Number Of Students From All Sending Schools	2.12	27	112
B 5	17	Existing Geographic Boundaries and/or Sending School Boundaries	2.11	27	108
B 7	18	A Lottery Selection System For All Admissions	1.58	10	143

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TABLE 13

Means, Frequency of Ratings in the 4 and 5 (High Degree of Equity) and 1 and 2 (Low Degree of Equity) Categories on the 5-Point Likert-Type Scale, and a mean Rank Ordered Listing of the Factors (Items) in Part C (Admitted Students Who Are on Waiting Lists) of the Public Occupational Education Admission Equity Opinionnaire For The Total Population

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=173)	
				(4 & 5)	(1 & 2)
C 3	1	Individual Interviews By Counselors and/or Instructors	3.97	127	13
C17	2	Ability to Meet Minimal Physical Performance Levels	3.69	103	31
C18	3	Minimum Age Requirements Necessary To Qualify For An	3.53	88	30
C 1	4	Standardized Aptitude Test Scores	3.31	70	36
C16	5	Standardized Work Sample Or Performance Test Scores	3.22	72	40
C 2	6	Previous Overall Grade Point Average	3.21	72	47
C10	7	The First Students to Apply Will Be the First Students Admitted	3.16	82	60
C 4	8	Standardized Achievement Test Scores	3.11	55	42
C13	9	Degree of Proficiency in English Language	2.95	52	53
C11	10	Standardized Interest Inventory Test Scores	2.92	56	57
C 8	11	Recommendations By Others	2.76	54	71
C15	12	Admission Preference Given to Students Who Are Women	2.57	40	80
C14	13	Standardized Intelligence Test Scores	2.53	29	77
C12	14	Admission Preference Given to Low Enrollment Program Areas	2.50	32	88
C 9	15	Admission of a Proportional Number of Students	2.39	37	92
C19	16	Standardized Personality Test Scores	2.30	21	91
C 5	17	Existing Geographic Boundaries and/or Sending School Boundaries	2.15	22	105
C 6	18	Admission of An Equal Number of Students From All Sending Schools	2.02	21	116
C 7	19	A Lottery Selection System for All Admissions	1.59	9	140

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TABLE 14
Area Vocational Technical Education Centers (AVTC)

Part B - Initial Admission or Program Area Admission

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies	
				(4 & 5) (N=118)	(1 & 2)
B 3	1	Individual Interviews By Counselors and/or Instructors	4.02	85	7
B17	2	Ability To Meet Minimal Physical Performance Levels	3.84	75	15
B18	3	Minimum Age Requirements Necessary To Qualify For An	3.62	62	19
B10	4	The First Student To Apply Will Be The First Student Admitted	3.29	58	31
B16	5	Standardized Work Sample Or Performance Test Scores	3.21	48	26
B 1	6	Standardized Aptitude Test Scores	3.21	37	25
B 4	7	Standardized Achievement Test Scores	3.06	29	30
B11	8	Standardized Interest Inventory Test Scores	3.04	40	34
B 2	9	Previous Overall Grade Point Average	3.01	38	40
B13	10	Degree Of Proficiency In English Language	2.92	32	37
B 8	11	Recommendations By Others	2.85	40	46
B14	12	Standardized Intelligence Test Scores	2.70	20	41
B 9	13	Admission Of A Proportional Number Of Students	2.61	30	54
B12	14	Admission Preference Given To Low Enrollment Program Areas	2.54	19	50
B19	15	Standardized Personality Test Scores	2.45	13	58
B15	16	Admission Preference Given To Students Who Are Women	2.30	13	59
B 6	17	Admission Of An Equal Number Of Students From All Sending Schools	2.15	17	74
B 5	18	Existing Geographic Boundaries and/or Sending School Boundaries	2.10	17	73
B 7	19	A Lottery Selection System for All Admissions	1.55	7	95

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TABLE 14 (Continued)
Area Vocational Technical Education Centers (AVTC)
Part C - Admitted Students Who Are On Waiting Lists

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=118)	
				(4 & 5)	(1 & 2)
C 3	1	Individual Interviews By Counselors and/or Instructors	3.97	85	9
C17	2	Ability To Meet Minimal Physical Performance Levels	3.75	69	19
C18	3	Minimum Age Requirements Necessary To Qualify For An	3.62	61	17
C 1	4	Standardized Aptitude Test Scores	3.36	42	20
C16	5	Standardized Work Sample Or Performance Test Scores	3.34	52	24
C10	6	The First Students To Apply Will Be The First Students Admitted	3.33	60	35
C 2	7	Previous Overall Grade Point Average	3.17	46	34
C 4	8	Standardized Achievement Test Scores	3.10	31	27
C11	9	Standardized Interest Inventory Test Scores	3.00	37	35
C13	10	Degree of Proficiency In English Language	2.89	36	39
C 8	11	Recommendations By Others	2.80	36	44
C14	12	Standardized Intelligence Test Scores	2.63	21	47
C12	13	Admission Preference Given To Low Enrollment Program Areas	2.57	22	54
C 9	14	Admission Of A Proportional Number Of Students	2.47	27	59
C19	14	Standardized Personality Test Scores	2.47	16	54
C15	15	Admission Preference Given To Students Who Are Women	2.46	21	56
C 5	16	Existing Geographic Boundaries and/or Sending School Boundaries	2.10	14	73
C 6	17	Admission Of An Equal Number Of Students From All Sending Schools	2.02	14	78
C 7	18	A Lottery Selection System For All Admissions	1.58	7	93

TABLE 15
Comprehensive Employment and Training Act Programs (CETA)

Part B - Initial Admission or Program Area Admission

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=8)	
				(4 & 5)	(1 & 2)
B 3	1	Individual Interviews By Counselors and/or Instructors	4.22	8	0
B17	2	Ability To Meet Minimal Physical Performance Levels	3.22	5	2
B15	3	Admission Preference Given to Students Who are Women	3.11	4	4
B16	3	Standardized Work Sample or Performance Test Scores	3.11	4	2
B 2	3	Previous Overall Grade Point Average	3.11	5	3
B12	4	Admission Preference Given to Low Enrollment Program Areas	3.00	2	2
B 4	4	Standardized Achievement Test Scores	3.00	2	2
B18	4	Minimum Age Requirements Necessary to Qualify For An	3.00	5	4
B10	5	The First Students to Apply Will Be the First Students Admitted	2.89	3	3
B 1	5	Standardized Aptitude Test Scores	2.89	3	3
B11	6	Standardized Interest Inventory Test Scores	2.78	3	3
B13	6	Degree of Proficiency in English Language	2.78	1	3
B 6	7	Admission of an Equal Number of Students From All Sending Schools	2.67	4	5
B 9	8	Admission of a Proportional Number of Students	2.44	2	5
B 8	9	Recommendations By Others	2.22	1	5
B 5	10	Existing Geographic Boundaries and/or Sending School Boundaries	1.67	1	7
B14	10	Standardized Intelligence Test Scores	1.67	0	7
B19	11	Standardized Personality Test Scores	1.56	1	8
B 7	12	A Lottery Selection System for All Admissions	1.44	0	8

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TABLE 15 (Continued)
Comprehensive Employment and Training Act Programs (CETA)
Part C - Admitted Students Who Are On Waiting Lists

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=8)	
				(4 & 5)	(1 & 2)
C 3	1	Individual Interviews by Counselors and/or Instructors	3.78	5	1
C10	2	The First Students to Apply Will be the First Students Admitted	3.22	5	3
C15	2	Admission Preference Given to Students Who are Women	3.22	5	3
C17	2	Ability to Meet Minimal Physical Performance Levels	3.22	4	3
C18	3	Minimum Age Requirements Necessary to Qualify for An	3.11	3	2
C 4	4	Standardized Achievement Test Scores	3.00	3	3
C 1	5	Standardized Aptitude Test Scores	2.89	4	3
C 8	6	Recommendations by Others	2.78	2	5
C16	6	Standardized Work Sample or Performance Test Scores	2.78	3	3
C 2	7	Previous Overall Grade Point Average	2.67	3	3
C13	7	Degree of Proficiency in English Language	2.67	0	3
C12	8	Admission Preference Given to Low Enrollment Program Areas	2.33	1	5
C11	9	Standardized Interest Inventory Test Scores	2.22	1	5
C 9	9	Admission of a Proportional Number of Students	2.22	1	5
C 6	10	Admission of an Equal Number of Students From All Sending Schools	2.11	2	6
C 5	11	Existing Geographic Boundaries and/or Sending School Boundaries	1.67	0	7
C19	12	Standardized Personality Test Scores	1.56	1	8
C14	13	Standardized Intelligence Test Scores	1.44	0	8
C 7	14	A Lottery Selection System for All Admissions	1.33	0	8

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TABLE 16
Community Colleges (CC)

Part B - Initial Admission or Program Area Admission

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=18)	
				(4 & 5)	(1 & 2)
B17	1	Ability to Meet Minimal Physical Performance Levels	3.94	13	2
B18	1	Minimum Age Requirements Necessary to Qualify for An	3.94	14	3
B 3	2	Individuals Interviews by Counselors and/or Instructors	3.67	11	2
B13	3	Degree of Proficiency in English Language	3.50	8	1
B 2	4	Previous Overall Grade Point Average	3.22	9	5
B11	5	Standardized Interest Inventory Test Scores	3.06	7	5
B 1	5	Standardized Aptitude Test Scores	3.06	6	7
B 4	6	Standardized Achievement Test Scores	3.00	5	5
B16	7	Standardized Work Sample or Performance Test Scores	2.94	6	5
B10	8	The First Students to Apply Will be the First Students Admitted	2.72	5	8
B15	8	Admission Preference Given to Students Who are Women	2.72	4	8
B 8	9	Recommendations by Others	2.44	2	8
B 5	10	Existing Geographic Boundaries and/or Sending School Boundaries	2.39	4	9
B 9	11	Admission of a Proportional Number of Students	2.28	3	11
B14	12	Standardized Intelligence Test Scores	2.17	2	10
B12	13	Admission Preference Given to Low Enrollment Program Areas	2.11	2	11
B 6	14	Admission of an Equal Number of Students From All Sending Schools	1.94	2	13
B 7	15	A Lottery Selection System for All Admissions	1.78	1	14
B19	15	Standardized Personality Test Scores	1.78	0	13

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TABLE 16 (Continued)
Community Colleges (CC)
Part C - Admitted Students Who Are On Waiting Lists

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies	
				(4 & 5) (N=18)	(1 & 2)
C18	1	Minimum Age Requirements Necessary to Qualify for An	4.06	14	3
C 3	2	Individual Interviews by Counselors and/or Instructors	4.00	14	1
C17	3	Ability to Meet Minimal Physical Performance Levels	3.83	12	3
C 2	4	Previous Overall Grade Point Average	3.61	10	2
C13	5	Degree of Proficiency in English Language	3.56	8	1
C 1	6	Standardized Aptitude Test Scores	3.33	10	4
C 4	7	Standardized Achievement Test Scores	3.22	9	4
C10	8	The First Students to Apply Will be the First Students Admitted	3.17	7	7
C11	9	Standardized Interest Inventory Test Scores	3.00	8	5
C16	10	Standardized Work Sample or Performance Test Scores	2.89	6	6
C15	11	Admission Preference Given to Students Who Are Women	2.83	6	8
C 8	11	Recommendations by Others	2.83	5	8
C12	12	Admission Preference Given to Low Enrollment Program Areas	2.61	5	9
C 5	13	Existing Geographic Boundaries and/or Sending School Boundaries	2.56	5	8
C 9	14	Admission of a Proportional Number of Students	2.17	3	12
C14	14	Standardized Intelligence Test Scores	2.17	1	9
C 7	15	A Lottery Selection System for All Admissions	2.00	1	12
C 6	16	Admission of an Equal Number of Students Form All Sending Schools	1.72	2	14
C19	16	Standardized Personality Test Scores	1.72	0	13

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TABLE 17
Advisory Councils (ADVISORY)

Part B - Initial Admission or Program Area Admission

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=19)	
				(4 & 5)	(1 & 2)
B17	1	Ability to Meet Minimal Physical Performance Levels	3.82	10	1
B 3	2	Individual Interviews by Counselors and/or Instructors	3.59	10	2
B 1	3	Standardized Aptitude Test Scores	3.53	9	4
B 4	4	Standardized Achievement Test Scores	3.47	9	3
B 2	5	Previous Overall Grade Point Average	3.24	7	5
B18	5	Minimum Age Requirements Necessary to Qualify for An	3.24	5	3
B14	6	Standardized Intelligence Test Scores	2.94	5	4
B13	7	Degree of Proficiency in English Language	2.88	5	5
B16	7	Standardized Work Sample or Performance Test Scores	2.88	5	5
B11	8	Standardized Interest Inventory Test Scores	2.82	5	7
B 8	9	Recommendations by Others	2.53	5	9
B10	10	The First Students to Apply Will be the First Students Admitted	2.47	4	8
B15	11	Admission Preference Given to Students Who are Women	2.35	3	9
B19	11	Standardized Personality Test Scores	2.35	3	8
B 9	12	Admission of A Proportional Number of Students	2.29	3	9
B12	13	Admission Preference Given to Low Enrollment Program Areas	2.24	0	8
B 5	14	Existing Geographic Boundaries and/or Sending School Boundaries	2.12	2	11
B 6	15	Admission of an Equal Number of Students From All Sending Schools	1.82	0	12
B 7	16	A Lottery Selection System for All Admissions	1.35	0	16

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TABLE 17 (Continued)
Advisory Councils (ADVISORY)
Part C - Admitted Students Who Are On Waiting Lists

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=19)	
				(4 & 5)	(1 & 2)
C 3	1	Individual Interviews by Counselors and/or Instructors	3.94	12	1
C17	2	Ability to Meet Minimal Physical Performance Levels	3.76	11	2
C 1	3	Standardized Aptitude Test Scores	3.53	8	4
C 4	4	Standardized Achievement Test Scores	3.35	8	3
C18	4	Minimum Age Requirements Necessary to Qualify for An	3.35	6	2
C16	5	Standardized Work Sample or Performance Test Scores	3.29	6	3
C 2	5	Previous Overall Grade Point Average	3.29	7	5
C11	6	Standardized Interest Inventory Test Scores	2.88	5	6
C14	7	Standardized Intelligence Test Scores	2.71	4	6
C13	8	Degree of Proficiency in English Language	2.65	3	6
C10	9	The First Students to Apply Will be the First Students Admitted	2.59	5	8
C 8	10	Recommendations by Others	2.47	4	8
C15	11	Admission Preference Given to Students Who are Women	2.29	3	9
C19	11	Standardized Personality Test Scores	2.29	3	9
C 9	12	Admission of A Proportional Number of Students	2.24	3	9
C12	13	Admission Preference Given to Low Enrollment Program Areas	2.18	2	10
C 5	14	Existing Geographic Boundaries and/or Sending School Boundaries	2.06	0	10
C 6	15	Admission of an Equal Number of Students From All Sending Schools	1.88	0	12
C 7	16	A Lottery Selection System for All Admissions	1.41	0	16

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TABLE 18
Advocacy Groups (ADVOCACY)

Part B - Initial Admission or Program Area Admission

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=10)	
				(4 & 5)	(1 & 2)
B 3	1	Individual Interviews by Counselors and/or Instructors	4.25	9	1
B 2	2	Previous Overall Grade Point Average	3.50	6	2
B15	3	Admission Preference Given to Students Who Are Women	3.00	5	5
B 4	4	Standardized Achievement Test Scores	2.92	4	4
B17	4	Ability to Meet Minimal Physical Performance Levels	2.92	4	4
B13	5	Degree of Proficiency in English Language	2.83	2	4
B16	5	Standardized Work Sample or Performance Test Scores	2.83	3	4
B 1	6	Standardized Aptitude Test Scores	2.75	4	4
B11	7	Standardized Intefest Inventory Test Scores	2.58	5	6
B18	7	Minimum Age Requirements Necessary to Qualify for An	2.58	3	6
B14	8	Standardized Intelligence Test Scores	2.33	1	7
B 8	8	Recommendations By Others	2.33	4	6
B10	9	The First Students to Apply Will be the First Students Admitted	2.25	3	8
B12	10	Admission Preference Given to Low Enrollment Program Areas	2.17	2	8
B 5	11	Existing Geographic Boundaries and/or Sending School Boundaries	2.08	1	8
B 6	11	Admission of an Equal Number of Students From All Sending Schools	2.08	3	8
B19	11	Standardized Personality Test Scores	2.08	1	7
B 7	12	A Lottery Selection System for All Admissions	1.83	2	10
B 9	13	Admission of A Proportional Number of Students	1.75	2	9

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TABLE 18 (Continued)
 Advocacy Groups (ADVOCACY)
 Part C - Admitted Students Who Are On Waiting Lists

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=10)	
				(4 & 5)	(1 & 2)
C 3	1	Individual Interviews by Counselors and/or Instructors	4.17	9	1
C 2	2	Previous Overall Grade Point Average	3.25	5	3
C15	3	Admission Preference Given to Students Who Are Women	3.17	5	4
C17	4	Ability to Meet Minimal Physical Performance Levels	3.08	5	4
C13	5	Degree of Proficiency in English Language	3.00	4	4
C 1	6	Standardized Aptitude Test Scores	2.92	6	5
C 4	7	Standardized Achievement Test Scores	2.83	4	5
C16	8	Standardized Work Sample or Performance Test Scores	2.75	3	4
C11	9	Standardized Interest Inventory Test Scores	2.67	5	6
C 6	10	Admission of an Equal Number of Students From All Sending Schools	2.58	3	6
C 8	10	Recommendations by Others	2.58	5	6
C 5	11	Existing Geographic Boundaries and/or Sending School Boundaries	2.50	3	7
C14	11	Standardized Intelligence Test Scores	2.50	2	7
C18	11	Minimum Age Requirements Necessary to Qualify for An	2.50	3	6
C10	12	The First Students to Apply Will be the First Students Admitted	2.33	4	7
C 9	13	Admission of A Proportional Number of Students	2.25	3	7
C12	14	Admission Preference Given to Low Enrollment Program Areas	2.17	2	10
C19	15	Standardized Personality Test Scores	2.08	1	7
C 7	16	A Lottery Selection System for All Admissions	1.42	1	11

TABLE 19
Administrators (ADMIN)

Part B - Initial Admission or Program Area Admission

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=96)	
				(4 & 5)	(1 & 2)
B 3	1	Individual Interviews by Counselors and/or Instructors	3.91	68	8
B17	2	Ability to Meet Minimal Physical Performance Levels	3.76	63	15
B18	3	Minimum Age Requirements Necessary to Qualify for An	3.72	59	15
B 1	4	Standardized Aptitude Test Scores	3.11	32	26
B16	5	Standardized Work Sample or Performance Test Scores	3.07	36	24
B10	6	The First Students to Apply Will be the First Students Admitted	3.05	39	33
B 2	6	Previous Overall Grade Point Average	3.05	36	32
B 4	7	Standardized Achievement Test Scores	3.03	24	25
B11	8	Standardized Interest Inventory Test Scores	2.96	34	31
B13	9	Degree of Proficiency in English Language	2.86	22	29
B 8	10	Recommendations by Others	2.62	25	45
B12	11	Admission Preference Given to Low Enrollment Program Areas	2.60	16	38
B15	12	Admission Preference Given to Students Who are Women	2.53	19	47
B 9	13	Admission of A Proportional Number of Students	2.48	23	52
B14	14	Standardized Intelligence Test Scores	2.45	16	46
B19	15	Standardized Personality Test Scores	2.14	7	59
B 5	16	Existing Geographic Boundaries and/or Sending School Boundaries	2.05	15	62
B 6	17	Admission of an Equal Number of Students From All Sending Schools	2.01	16	70
B 7	18	A Lottery Selection System for All Admissions	1.61	4	79

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TABLE 19 (Continued)
Administrators (ADMIN)
Part C - Admitted Students Who Are On Waiting Lists

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=96)	
				(4 & 5)	(1 & 2)
C 3	1	Individual Interviews by Counselors and/or Instructors	3.94	69	8
C18	2	Minimum Age Requirements Necessary to Qualify for An	3.72	57	14
C17	3	Ability to Meet Minimal Physical Performance Levels	3.70	59	16
C 1	4	Standardized Aptitude Test Scores	3.31	41	18
C10	5	The First Students to Apply Will be the First Students Admitted	3.27	46	30
C 2	6	Previous Overall Grade Point Average	3.16	38	27
C 4	7	Standardized Achievement Test Scores	3.11	30	23
C16	8	Standardized Work Sample or Performance Test Scores	3.10	37	25
C11	9	Standardized Interest Inventory Test Scores	2.87	30	32
C13	10	Degree of Proficiency in English Language	2.86	24	31
C 8	11	Recommendations by Others	2.74	29	41
C15	12	Admission Preference Given to Students Who are Women	2.69	27	42
C12	13	Admission Preference Given to Low Enrollment Program Areas	2.60	20	46
C14	14	Standardized Intelligence Test Scores	2.39	14	48
C 9	14	Admission of A Proportional Number of Students	2.39	20	53
C19	15	Standardized Personality Test Scores	2.15	8	57
C 5	16	Existing Geographic Boundaries and/or Sending School Boundaries	2.13	15	61
C 6	17	Admission of an Equal Number of Students From All Sending Schools	1.87	12	70
C 7	18	A Lottery Selection System for All Admissions	1.72	6	72

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TABLE 20
Counselors (COUNS)

Part B - Initial Admission or Program Area Admission					
Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=15)	
				(4 & 5)	(1 & 2)
B17	1	Ability to Meet Minimal Physical Performance Levels	4.07	10	2
B 3	2	Individual Interviews by Counselors and/or Instructors	3.93	9	1
B16	3	Standardized Work Sample or Performance Test Scores	3.36	7	2
B10	4	The First Students to Apply Will be the First Students Admitted	3.29	9	4
B18	5	Minimum Age Requirements Necessary to Qualify for An	3.21	5	3
B 1	6	Standardized Aptitude Test Scores	3.14	6	3
B11	7	Standardized Interest Inventory Test Scores	3.00	5	4
B 2	7	Previous Overall Grade Point Average	3.00	6	6
B 4	8	Standardized Achievement Test Scores	2.93	4	5
B13	8	Degree of Proficiency in English Language	2.93	3	4
B15	9	Admission Preference Given to Students Who are Women	2.71	2	5
B 9	10	Admission of A Proportional Number of Students	2.50	3	7
B14	10	Standardized Intelligence Test Scores	2.50	1	5
B 8	11	Recommendations by Others	2.43	2	7
B12	12	Admission Preference Given to Low Enrollment Program Areas	2.36	2	7
B 5	12	Existing Geographic Boundaries and/or Sending School Boundaries	2.36	2	9
B19	12	Standardized Personality Test Scores	2.36	1	6
B 7	13	A Lottery Selection System for All Admissions	2.29	4	9
B 6	14	Admission of an Equal Number of Students From All Sending Schools	2.14	2	10

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TABLE 20 (Continued)
Counselors (COUNS)
Part C - Admitted Students Who Are On Waiting Lists

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=15)	
				(4 & 5)	(1 & 2)
C 3	1	Individual Interviews by Counselors and/or Insutrctors	4.00	9	1
C17	2	Ability to Meet Minimal Physical Performance Levels	3.93	9	3
C18	3	Minimum Age Requirements Necessary to Qualify for An	3.43	5	2
C10	4	The First Students to Apply Will be the First Students Admitted	3.21	8	5
C16	4	Standardized Work Sample or Performance Test Scores	3.21	7	3
C 2	4	Previous Overall Grade Point Average	3.21	7	5
C 1	5	Standardized Aptitude Test Scores	3.14	5	4
C 4	6	Standardized Achievement Test Scores	3.00	4	4
C13	6	Degree of Proficiency in English Language	3.00	4	3
C11	7	Standardized Interest Inventory Test Scores	2.86	4	5
C12	8	Admission Preference Given to Low Enrollment Program Areas	2.71	4	7
C15	9	Admission Preference Given to Students Who are Women	2.64	2	6
C 8	10	Recommendations by Others	2.57	3	7
C14	11	Standardized Intelligence Test Scores	2.36	1	6
C 9	12	Admission of A Proportional Number of Students	2.14	2	9
C 5	12	Existing Geographic Boundaries and/or Sending School Boundaries	2.14	1	9
C19	12	Standardized Personality Test Scores	2.14	1	8
C 7	13	A Lottery Selection System for All Admissions	2.00	3	10
C 6	13	Admission of an Equal Number of Students From All Sending Schools	2.00	2	10

TABLE 21
Instructors (INSTR)

Part B - Initial Admission or Program Area Admission

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=38) (4 & 5) (1 & 2)	
B 3	1	Individual Interviews by Counselors and/or Instructors	4.22	30	1
B17	2	Ability to Meet Minimal Physical Performance Levels	3.78	22	3
B10	3	The First Students to Apply Will be the First Students Admitted	3.44	20	8
B13	3	Degree of Proficiency in English Language	3.44	19	9
B18	4	Minimum Age Requirements Necessary to Qualify for An	3.42	19	9
B16	5	Standardized Work Sample or Performance Test Scores	3.39	17	7
B 1	6	Standardized Aptitude Test Scores	3.19	9	8
B 8	7	Recommendations by Others	3.17	18	11
B11	8	Standardized Interest Inventory Test Scores	3.14	13	10
B 2	9	Previous Overall Grade Point Average	3.08	12	11
B 4	10	Standardized Achievement Test Scores	3.06	9	10
B14	11	Standardized Intelligence Test Scores	2.89	7	10
B19	12	Standardized Personality Test Scores	2.72	7	16
B 9	13	Admission of a Proportional Number of Students	2.67	10	14
B 6	14	Admission of an Equal Number of Students From All Sending Schools	2.58	7	15
B12	15	Admission Preference Given to Low Enrollment Program Areas	2.28	5	21
B 5	16	Existing Geographic Boundaries and/or Sending School Boundaries	2.22	6	21
B15	17	Admission Preference Given to Students Who are Women	2.14	3	20
B 7	18	A Lottery Selection System for All Admissions	1.36	1	32

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TABLE 21 (Continued)
Instructors (INSTR)
Part C - Admitted Students Who Are On Waiting Lists

Factors (Items)	Mean Rank Order	Abbreviated Item Descriptions	Means	Frequencies (N=38)	
				(4 & 5)	(1 & 2)
C 3	1	Individual Interviews by Counselors and/or Instructors	4.03	29	3
C17	2	Ability to Meet Minimal Physical Performance Levels	3.64	20	7
C16	3	Standardized Work Sample or Performance Test Scores	3.58	18	6
C10	4	The First Student to Apply Will be the First Students Admitted	3.42	20	11
C13	5	Degree of Proficiency in English Language	3.36	19	9
C18	5	Minimum Age Requirements Necessary to Qualify for An	3.36	18	9
C 1	6	Standardized Aptitude Test Scores	3.33	12	7
C 2	7	Previous Overall Grade Point Average	3.25	15	9
C11	8	Standardized Interest Inventory Test Scores	3.19	14	10
C 8	9	Recommendations by Others	3.08	15	11
C 4	10	Standardized Achievement Test Scores	3.03	10	11
C14	11	Standardized Intelligence Test Scores	2.83	9	13
C19	12	Standardized Personality Test Scores	2.81	9	13
C 9	13	Admission of A Proportional Number of Students	2.58	10	16
C 6	14	Admission of an Equal Number of Students From All Sending Schools	2.47	6	18
C12	15	Admission Preference Given to Low Enrollment Program Areas	2.36	5	19
C15	16	Admission Preference Given to Students Who are Women	2.31	5	20
C 5	17	Existing Geographic Boundaries and/or Sending School Boundaries	2.22	5	21
C 7	18	A Lottery Selection System for All Admissions	1.31	0	34

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TABLE 22

Kendall Rank Order Correlation Coefficients for the Five Sub-Groups in A1
(Institution or Affiliation) on Part B (Initial Admission or
Program Area Admission) and Part C (Admitted Students
Who are on Waiting Lists) of the Public Occupational
Education Admission Equity Opinionnaire

Sub-Groups	Part	AVTC	CETA	CC	ADVISORY	ADVOCACY
AVTC	B	1.0000				
	C	1.0000				
CETA	B	.5648	1.0000			
	C	.6090	1.0000			
CC	B	.5977	.5472	1.0000		
	C	.7042	.5886	1.0000		
ADVISORY	B	.6962	.4667	.6687	1.0000	
	C	.8225	.5285	.6845	1.0000	
ADVOCACY	B	.5016	.6687	.6043	.6506	1.0000
	C	.4392	.4880	.5612	.5254	1.0000

Note: The top coefficients represent the relationship between the sub-groups on Part B and the bottom coefficients represent those sub-groups relationships on Part C.

TABLE 23

Kendall Rank Order Correlation Coefficients for the Administrator,
Counselor, and Instructor Sub-Groups in A2 (Title or Role
Category) on Part B (Initial Admission or Program Area
Admission) and Part C (Admitted Students
Who Are on Waiting Lists) of the Public
Occupational Education Admission
Equity Opinionnaire

Sub-Groups	Part	ADMIN	COUNS	INSTR
ADMIN	B	1.0000		
	C	1.0000		
COUNS	B	.8240	1.0000	
	C	.8651	1.0000	
INSTR	B	.6765	.6926	1.0000
	C	.7000	.7569	1.0000

Note: The top coefficients represent the relationship between the sub-groups on Part B and the bottom coefficients represent those sub-groups relationships on Part C.